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**INTERGRATED MODEL DEVELOPMENT ENVIRONMENT (IMDE)
MULTI-FUNCTION AEROSPACE SUPPORT SYSTEM (MASS STUDY)**

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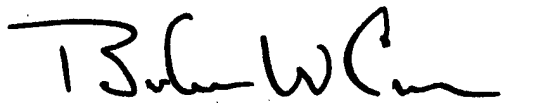
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PREFACE

This effort was accomplished primarily by the USAF Armstrong Laboratory, Logistics Research Division, Wright-Patterson AFB, Ohio. The work is being accomplished under the Supportability Investment Decision Analysis Center (SIDAC) Contract F33657-92-D-2055, task #88, work unit 1710-00-93. The principal investigators for this effort were Capt. Todd Carrico from Armstrong Laboratory and Mr. Pat Clark from TASC, Inc.

The purpose of this task was to evaluate the impact of multi-function aerospace support systems. This was done through the use of the Integrated Model Development Environment (IMDE), a simulation and modeling tool developed by Armstrong Laboratory. TASC, Inc. was the principal contractor. The overall goal of a larger Armstrong Laboratory program is to identify how combining the functionality of current Aerospace Ground Equipment (AGE) systems into a modern, systems engineered design might improve the deployment footprint of USAF flying units. Within the scope of this task the team collected data on existing AGE and developed simulation models to consider the sortie generation implications of combining AGE functionality. The data collected included information on the usage, quantities, failure rates, and repair rates of existing powered AGE equipment. Using this information, simulation experiments were constructed and run to evaluate the effects of replacing components of AGE with more reliable, but fewer, Multi-function Aerospace Support System (MASS) units.

The authors depended on information and cooperation from many different sources to complete this study. Specifically, Capt. Pat Vincent collected data and helped to analyze the sortie generation process. Capt. Vincent also converted several LCOM databases, obtained AGE quantity and failure rate data, and generally kept us on target. Mr. Bob Johnson of Armstrong Laboratory was instrumental in setting up relationships with the 178th Fighter Group (ANG) that allowed the team to visit several times and see first-hand how AGE was currently employed. CMSgt. Orin Grossjean and his staff provided valuable expertise in describing and showing how AGE operations were carried out at the 178th. Mr. Ed Boyle of Armstrong Laboratory was very helpful in describing a vision for new potential MASS candidates. Mr. Jeff Sumner of TASC developed a computer program to merge the AGE/task matrix with the LCOM four-digit work unit code database, eliminating much of the necessary manual data entry. Together the efforts of these people were instrumental to the successful model development and analysis accomplished under this effort.

LIST OF ABBREVIATIONS

ACC	Air Combat Command
AL/HRGO	Armstrong Laboratory/Logistics Research Division
ANG	Air National Guard
ARPA	Advanced Research Projects Agency
ASC	Aeronautical Systems Center
CAS	Close Air Support
CND	Can Not Duplicate
DISE	Deployment Information Support Environment
ECLIPSE	Enhanced Contingency Logistics Planning Support Environment
GCCS	Global Command and Control System
GPGU	Ground Power Generator Unit
ICT	Integrated Combat Turn
IMDE	Integrated Model Development Environment
LCOM	Logistics Composite Model
MASS	Multi-function Aerospace Support System
MTBF	Mean Time Between Failures
MTTR	Mean Time To Repair
NDAA	Non-Developmental Airlift Aircraft
PAA	Primary Aircraft Authorized
REMIS	Reliability and Maintainability Information System
RTOK	Retest OK
SIDAC	Supportability Investment Decision Analysis Contract
SRU	Shop Replaceable Unit
TOA	Table of Allowances
USAF	United States Air Force
UTC	Unit Type Code
WRM	War Reserve Material
WUC	Work Unit Code

SUMMARY

This report documents the results of the IMDE MASS Study. Specifically, it describes the current AGE environment, data collection to establish an "as-is" baseline for current flight-line AGE operations, and model development and analysis using these data.

The goal of this task was to model current AGE usage when supporting fighter sortie generation and look for opportunities to improve the overall maintenance process by developing candidate systems that combined multiple AGE functionalities. These candidate systems are referred to as MASS units. A secondary goal was to develop these models to be rapidly reconfigurable using the IMDE set of tools developed under a previous effort. IMDE provides extensive support for the development, execution, and analysis of object-oriented simulation models.

The data collected for this research included several Logistics Composite Model (LCOM) databases, Unit Type Code (UTC) listings, and an AGE usage matrix for seven different varieties of powered AGE. The output data generated from the LCOM simulations was extensive; this data was analyzed to develop the IMDE simulation models used in this report. The end result of the IMDE simulation was to conclude whether MASS candidates could replace AGE units in a deployment.

A validated set of sortie generation processes for each weapon system under consideration was available via the set of USAF standard LCOM databases. These databases were automatically converted into IMDE object-oriented models, capturing these already validated processes. The IMDE models were modified to incorporate AGE usage based on information obtained from talking to AGE shop and flightline technicians. Quantities and estimated failure and repair rates for AGE were incorporated into the models. The results from the simulations indicate the following:

- For the F16, electrical and air conditioning service are the "high drivers" for AGE redesign. In other words, these two utilities have the highest demand, and footprint would be reduced mostly by combining generators and air conditioners in a MASS design.
- Eight MASS units are needed to support a typical 18 aircraft, 2.0 sortie schedule. In contrast, the number of single function AGE units needed to support the same schedule is 44.
- Utilization rates of the support equipment did not significantly differ from the MASS units in place as compared to the utilization rate of the most-requested AGE, the generator; therefore, a MASS unit would be just as available for other, non-support related uses as a generator is presently.
- No definite data were available on the potential reliability of a MASS unit. Two different values were used to represent the high and low end of the reliability spectrum.

Further study is needed to bolster these results and analyze whether the physical size of the new MASS units would actually result in a reduction in AGE deployment footprint.

INTRODUCTION

Today's military engagement scenario is much different from that of five years ago. In the Cold War Era, although the threats loomed much larger, they were at least thought to be very predictable. Our major potential adversary was the Warsaw Pact, and the potential warfighting scenarios had been evaluated for decades. The United States had alliances in place to defend against this threat, and had stockpiled huge reserves of War Reserve Material (WRM), pre-positioned at strategic locations where forces would be deployed if the anticipated crisis erupted. Deployment to these locations was greatly simplified for the arriving units, since they could count on a level of support provided by the WRM, without bringing every piece of needed equipment with them.

The current environment has changed considerably from the recent past, resulting from the collapse of the Warsaw Pact, followed by the dissolution of the Soviet Union. Today several totally different geographic deployment scenarios could be envisioned, ranging from Iran/Iraq/Kuwait, Haiti, Bosnia, Korea, Somalia, and many similar, less well-reported, potential areas of conflict. In a budget deficit and debt conscious era, there is no question that the past buildups of WRM will be impossible to justify, considering the uncertainty of which potential location(s) will need prepositioned supplies. The alternative is to move the support assets when they are needed instead of prepositioning them. This option requires sufficient airlift assets to move support material rapidly into position. The budget concerns again come into play with the aging C-141 fleet, the insufficiency of current C-17 acquisitions to fill the anticipated gap, and the uncertainty of the Non-Developmental Airlift Aircraft (NDAA) program. Possibly, there will be less airlift capability available than desired if one of these issues is not favorably resolved. In attempts to mitigate this potential problem, many research efforts are targeted at reducing the amount of material needed to support deploying forces. These studies range from enabling better planning and coordination, preventing overlap and promoting synergy in the individual deployed units, to redesigning current systems to reduce their dependence on support systems. One example of those studies is this effort, which tries to reduce the amount of flightline support equipment used. Examples of planning efforts are the Global Command and Control System (GCCS), the Advanced Research Projects Agency (ARPA)-sponsored Joint Task Force Advanced Technology Demonstrator Project, and the Armstrong Laboratory's Enhanced Contingency Logistics Planning Support Environment (ECLiPSE) and Deployment Information Support Environment (DISE). On the other end of the efforts are the development of the F-22 advanced tactical fighter, which is managing down the requirements for a "logistics tail" during the acquisition phase.

This effort, like the F-22 program, focuses on reducing the support equipment needed for a deploying unit. In a recent study, ASC concluded that a significant portion of the deployment material by weight was composed of the flightline support equipment (Figure 1). The premise of this study is that the portion of the deployment footprint represented by flightline support equipment could be significantly reduced through the redesign of powered AGE units, possibly by combining the functionality of different units. AGE units currently provide functions including power

generation, air conditioning, hydraulics system servicing, compressed air, compressed and liquid nitrogen, and deicing. These units are very heavy, typically over 1,000 pounds each.

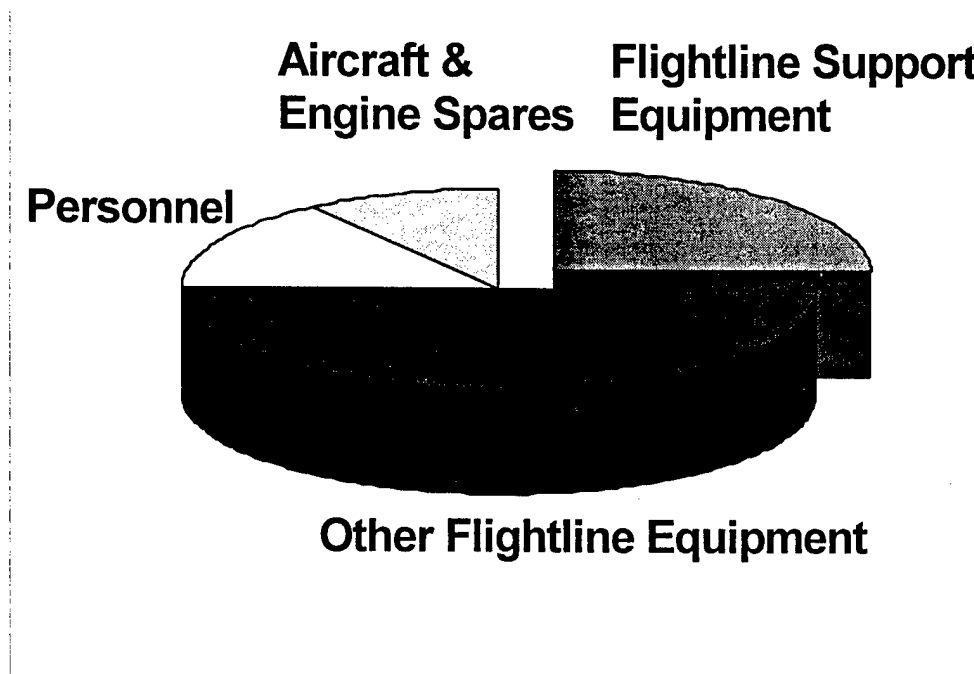


Figure 1
Deployment material by weight (366th Composite Wing)

The focus of the current study was evaluating the ability of a small number of MASS units to generate the same number of sorties as existing AGE assets. The simulations were constructed to compare AGE and MASS units on the tasks involved in the sortie generation process. The engineering feasibility of packaging the MASS unit to achieve weight and volume deployment reduction was not considered. Only resource levels and utilization rates were studied in the context of sortie production.

METHODOLOGY

One tradeoff in constructing a dynamic simulation model of a complex system is between fidelity of the model and the time available to construct the model. Much time is typically spent extracting information about important processes involved from the people involved. Fortunately for this study, much of this effort had already been completed by taking advantage of existing LCOM databases. The role of these databases is depicted in Figure 2, which shows them as the starting point for the process used during this study to construct the simulation models. The steps in this process are described in this section.

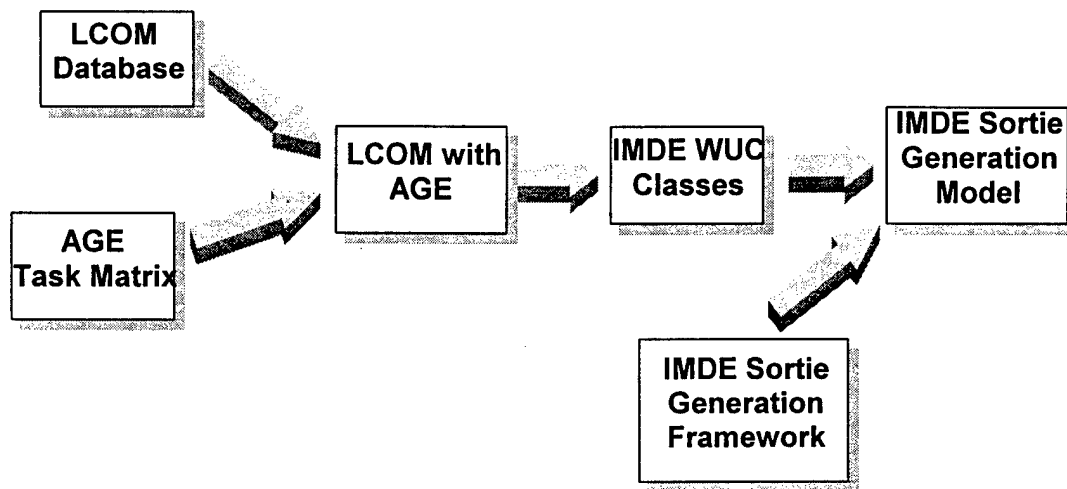


Figure 2.
AGE/MASS Model Construction Process

LCOM is an approved USAF simulation system for base-level logistics "resource" optimization, and an audited LCOM database exists for certain weapon systems in the USAF inventory. An LCOM database specifies all the resources (parts, people, and facilities), tasks, and task sequencing which are involved with the sortie generation process and impact the sortie production rates. Other data files can provide LCOM with additional information such as flying schedules, tasks, and sequencing for phase inspections and reconfiguration. Over the last 18 months, TASC, Inc. has developed an automatic conversion program which reads LCOM databases in their native ASCII file format and translates them into IMDE models within an object-oriented database. This conversion capability has allowed the study team to import all of the approved, audited processes from LCOM without having to collect the data themselves. Such a data collection effort would have easily exceeded the scope of this total study. The LCOM databases proved to be a very large part of our data collection needs. Other information resources required for this study, including a matrix detailing what maintenance processes require what AGE units, will be explained in detail in later sections.

Basic Model Development

The IMDE sortie generation model parallels the processes captured in LCOM, but adds value in making a more maintainable, "white-box" simulation. IMDE simulation processes are presented visually as flow charts, from which the simulation source code is actually generated. This

means that the model is visible to non-programmers, and is not just a "black box." The ability to rapidly change input parameters or behavior is due to the construction of the model using object-oriented technology. Simply put, this method of model construction results in a set of objects that populate the simulated world. These objects are the simulated entities that act on or are acted upon during the course of the model execution. Unlike other simulation tools, however, IMDE is readily understood and used by programmers, analysts and end users alike, due to its graphical modeling power.

For this study, seven different types of AGE units were evaluated. Each type helps support the maintenance process by providing mechanical services to an aircraft during the repair process. One or more AGE units might be needed whenever a subsystem on an aircraft fails after a sortie; the exact specification of what AGE unit is needed to help repair what subsystem is defined in an AGE task matrix. The creation and definition of the task matrix is defined later. The seven types of AGE units studied are listed below:

- MC-1A Air Compressor
- MC-2A Air Compressor
- Nitrogen (N₂) Servicing Cart
- AM32C-10 Air Conditioning Unit
- AM32A-60 Generator
- MJ-2A Hydraulic Stand
- NF-2D Light Cart

The sortie generation model used for this study consists of two large groupings of object classes. The first group consists of the entities that are in such a model for any aircraft system. The second group is comprised of weapon system specific data used to model unscheduled maintenance, different mission types, and reconfiguration processes. This group is constructed from the LCOM databases and will be discussed at length later in this report. The sortie generation process is depicted in Figure 3. Sorties are generated based on a flying schedule and available aircraft. Once aircraft are assigned, a preflight time delay is simulated, a time delay to simulate the sortie duration is performed, and then required aircraft servicing is done before the aircraft are returned for their next mission assignment.

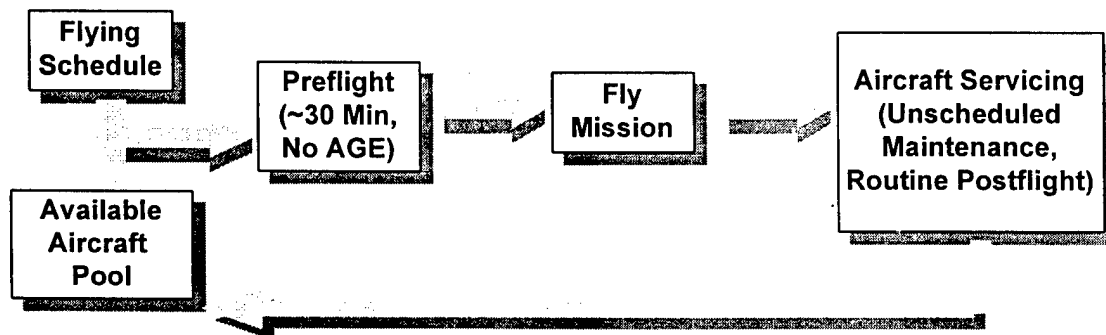


Figure 3.
Basic Sortie Generation Model

Framework Classes

The first group of entities in the simulation are called the framework classes. These consist of the following types:

- Scenario
- MissionGenerator
- MissionType
- Mission
- Theater
- Airbase
- Squadron
- Aircraft
- PartObj

Together this set of classes describes a framework into which the weapon system specific classes can be easily “plugged in.” The final report for SIDAC Task 28 details how this is done using IMDE. The role each class plays in the simulation is briefly described below.

The Scenario class is the “top-level” object in the simulation. It initializes the MissionGenerator class, which gets the simulation rolling by assigning missions at the Theater, Airbase, and Squadron levels. The Scenario has a list of the Theaters involved in the simulation, as well as simulation run length parameters.

The MissionGenerator class drives the simulation. It simulates the generation of specific types of sorties to be flown at specific times, based on an attached list of MissionTypes. These sorties will be created and then assigned to the Scenario object to distribute to the appropriate Theater. The MissionGenerator will also read a flying schedule generated by LCOM.

The MissionType class provides the information to allow the MissionGenerator to create its sorties. MissionType has the following attributes: sorties aborted, sorties completed, max aircraft, min aircraft, mean sortie time, sortie time standard deviation, launch time, lead time, cancel time, and required configuration. The MissionGenerator creates Missions by drawing against the mean times in the applicable MissionType class. For this study, we made several child classes of MissionType: CAPMission, Interdiction, CAS, and EscortMission. Each had different values for the attributes inherited from the parent MissionType class. For the actual runs we used only the CAPMission class, to correspond with the flying schedule obtained from the LCOM schedule generator.

Each Mission generated by the MissionGenerator has a specific takeoff time, number of aircraft, list of specific tail numbers assigned, and sortie duration. When a Mission completes or aborts, it notifies its MissionType to update either the sorties completed or aborted statistics.

The Theater class allows the model to be extended to have multiple Airbases. In the current model there is only one Airbase and the Theater just passes Missions down to the Airbase for assignment.

The Airbase class has a list of Squadrons. It takes Missions assigned from its Theater and assigns them to specific Squadrons. In the current model, there is only one Squadron. The model will be expanded to include a composite wing consisting of the F-16 squadron and an F-15 squadron. Airbase also has several resource managers, each descended from the IMDE standard class Resource Manager. These managers simulate the supply, manpower, and support equipment resource pools.

The Squadron class has a list of Aircraft to which it can assign Missions. It includes the logic to select the best-fit Aircraft for the desired MissionType, reconfigure those Aircraft if needed, wait for them to be mission-ready, and launch and recover them.

The Aircraft class includes the logic to preflight, fly a sortie, postflight, and check for unscheduled maintenance requirements. An Aircraft instance has a list of all its component Work Unit Codes (WUCs), each of which is descended from PartObj. After a sortie is completed, each failure clock is decremented by decreasing the WUC clock by one, and checked for failure. Clocks for WUCs are initialized by their mean time between failures (MTBF), which is a value obtained from existing LCOM databases. A failure occurs in the aircraft when one of the clocks of a WUC is less than zero. If so, then the maintenance network for that WUC is activated. Resources are utilized and ledgers kept to record that failure.

The PartObj class, besides having a failure clock attribute, has a main method called FixPart. This method incorporates all the LCOM task networks for each WUC child of PartObj. In general, the FixPart process will follow a similar flow for different WUCs, which is shown in Figure 4. When the part's failure clock has breached, it is still on the aircraft. At this point, either a could-not-duplicate action, a minor-maintenance action, or a remove-and-replace action is simulated. Different parts have different probabilities of these actions occurring, which are set by CAMS and REMIS data processed by the LCOM preprocessor programs. The task times and required resources are also drawn from these sources of real-world maintenance data. Can-Not-Duplicate (CND) and minor-maintenance actions, once completed, release the aircraft for another Mission assignment. Remove-and-replace actions will delay the aircraft until a replacement part is available from supply or the existing part is fixed in the shop. A variety of tasks can be performed in the shop after the removal, ranging from a Retest OK (RTOK) to replacement of one or more Shop Replaceable Units (SRUs). The probabilities here are also based on field data collated by the LCOM preprocessor. When the part finishes its shop tasks, it is returned to supply where it can be used to fill a hole in another remove-and-replace action. A more detailed explanation of subsystem repair can be found in "LCOM Explained", by Ed Boyle of Armstrong Laboratories.

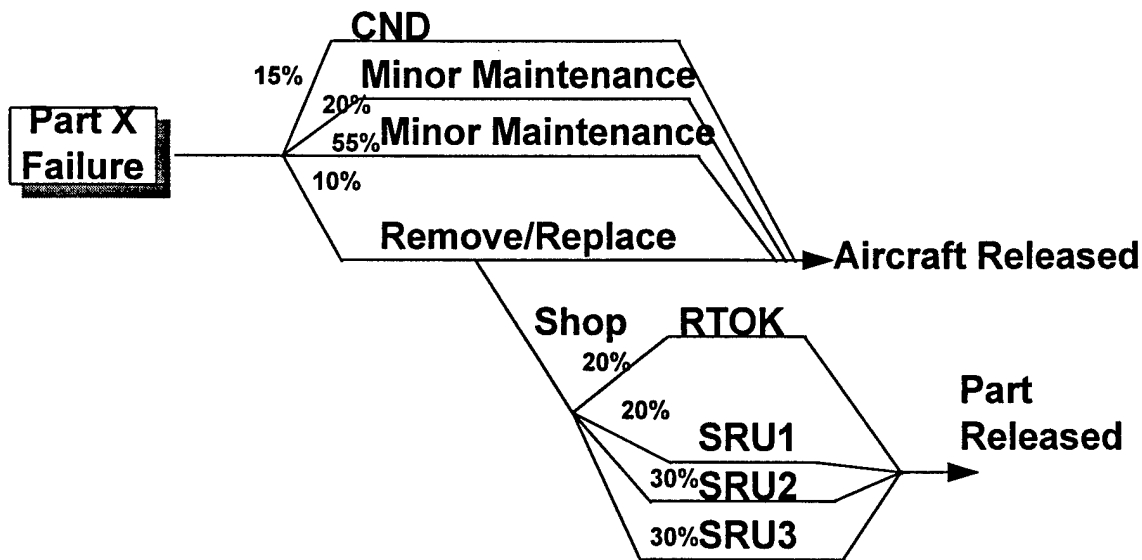


Figure 4.
Typical Part Repair Network

Weapon System Specific Classes

The second grouping of simulation classes is automatically generated from LCOM databases and results in the creation of several hundred classes for the F-16, which are children of the PartObj class. Ideally, the combination of different aircraft types in the same simulation, using the same resources, would show the ability of the proposed MASS candidates to support operations of a composite wing unit.

AGE Modeling

Although LCOM has the capability to specify support equipment resources for each sortie generation task, most databases on record have not collected this information. To correctly construct the AGE/MASS model, an extension of the existing LCOM databases was required. This involved a data gathering effort to ascertain which pieces of powered AGE were used for which LCOM tasks. A matrix was developed to collect this information. This matrix (at the 4-digit WUC level) is included in Appendix B. At the 3-digit work unit code level, this matrix was filled out by several USAF aircraft maintenance personnel. Prior to distributing the matrix, it was filled out to include other information to help the maintainers identify more clearly which unscheduled maintenance actions were being described. This information included the description of the WUC, the type and quantity of manpower needed to fix the subsystem, how many times the system would fail, on average, during a 500-day simulation run in LCOM, and the mean task time.

For each WUC, the matrix would typically contain five to seven tasks. Per LCOM convention, each task name contains the WUC, but has a different first letter. For example, WUC

11A00 might have several entries in the three-digit matrix, one or more for each of the access process (X11A00), troubleshooting (T11A00), minor maintenance (M11A00), could not duplicate (H11A00), remove and replace (R11A00), etc.

On January 24, 1995, representatives from AL/HRGO traveled to the Springfield Air National Guard Base to get the information needed to complete the gaps in the four-digit AGE matrix. Several technicians who worked with the AGE and performed the various repair duties detailed in the matrix were interviewed. Included in this group were specialists in munitions, avionics, environmental control, hydraulics, and a few crew chiefs. The conversations concentrated on the types and quantities of AGE needed for all of the "R" WUC tasks.

Adequate information was obtained to fill out most of the matrix. After obtaining their opinions on what was needed for the R tasks of a WUC, that entry was copied to any H, M, T, V, or X task in the matrix for that WUC, assuming that any AGE is present for the entire repair process. Next, the old three-digit matrix was examined. If there were any matches between the old and the new entries, all information pertaining to AGE was copied from the three-digit to the four-digit matrix. Any other gaps were filled by looking at general patterns, such as other similar three-digit code entries and any general patterns concerning two-digit WUCs (for example, avionics WUCs).

There is no available source in the Air Force community listing AGE usage by WUC. The authors feel that by interviewing the experts who routinely use AGE units to repair certain WUCs, the vital task matrix can be created in an adequate way. The method outlined above filled in almost all of the matrix. However, it must be noted that the information received from the maintenance workers and other technicians was not verified; the users of this study must take this fact into account.

The next step in constructing the model was to take the completed AGE/LCOM task matrix and add the information obtained from it back into the standard LCOM database. Seven AGE units were studied. A 'yes' found in a specific AGE column for a WUC, meant that the specific AGE was needed for the repair of the subsystem. If an AGE unit was required for a repair, we assumed that it would be needed and used by the WUC for the length of the repair process. The WUCs for the F-16 were originally detailed to the three-digit level; at this point, it was assumed that any specific processes below that level were "rolled up." The next step was to incorporate the AGE usage information into the LCOM database. A C program was written to provide this functionality, since it was anticipated that many changes to the matrix might be seen as more people were asked to evaluate it. This first conversion into IMDE created 136 different subsystem classes, each analogous to a three-digit WUC on the F-16.

After this process, the modified LCOM database contained AGE requirements for every sortie generation task. Next, the database was converted to an IMDE database and experiments were run with the quantities and durations set to desired values. Before any analysis could be done on the three-digit work unit code database, it was decided after review of the matrix by several other USAF maintenance people that visibility into AGE use was required at a lower level to achieve the desired model fidelity. A four-digit LCOM F-16 database was acquired and the matrix modified to

include tasks at the four-digit level. This new matrix was then reviewed and filled out in a manner similar to its predecessor, merged with the four-digit LCOM database, and converted into IMDE. This model was much more complex due to the increased number of WUC classes generated. At the four-digit level there were 614 classes, each containing a method or methods that detailed the repair process: required resources, (such as parts), manpower or AGE, and how much of a time delay was involved for each task. The size of this model was larger than anything yet compiled by the study team, and actually failed to compile when first attempted. This problem was solved by obtaining a newer version of the compiler.

In addition to converting the LCOM databases into an IMDE-compatible format, additional changes were required to construct a dynamic model that made sense. The major modifications are discussed below.

Allocation of Requested Resources

Any LCOM-generated task may require a specific part, man and/or a piece of AGE. The subsystem object, (when something is needed), makes a request to a special object in our simulation, the Resource Manager, for the needed item. The Resource Manager fields incoming requests for items, checks to see that it manages those items (as determined by the user before run-time), and allocates them to the requesting object if the desired number of resource units is available. If an item is not currently available, the manager blocks that request until another object in the simulation frees one up. The blocking process is analogous to putting the requesting object in a queue. When the requesting object receives the item, it then proceeds with its execution. When the repair is complete, the object then returns the item to the Resource Manager who then updates its count of the available items (or resources) it manages, and the simulation continues.

In the AGE/MASS simulation, three separate Resource Managers are defined. One is in charge of all the spare parts in the model, one manages all manpower available, and the third Resource Manager manages all AGE present. All initial quantities for parts, men, and AGE are either read in by a data file at run-time or specified by the user before execution. The first two Resource Managers (for parts and men) function exactly as detailed above. Subsystems request men and parts for their repairs. Each manager takes the requests and evaluates its own status by checking how many parts, for example, are available right now. If the number available is equal to or greater than the number requested, the request is fulfilled and the subsystem can continue with its repair process. If there are not enough parts available immediately, the repair process cannot continue until enough resources are returned from other subsystems to fulfill this request. Also, once the subsystem is done with its resource (for example, the repair is over and the men need to be released), the system asks the manager to "take back" the resources. The manager then updates the count of available men, fulfills any pending requests from other systems that are waiting for men, and the simulation continues.

However, this process of fulfilling requests and relinquishing resources is more complex for AGE. One problem that appeared when modeling the use of AGE is that more than one piece of the same type of AGE should not be at the same aircraft simultaneously. For instance, if a generator is

needed to fix one subsystem, but the aircraft with that failed subsystem already has a generator at its location, another one should not be requested. This is a difficult concept to model using the LCOM system. Another related difference for the support equipment Resource Manager is the process of relinquishing AGE when the repair is complete. For example, what if two subsystems on the same aircraft are sharing a piece of AGE, and then one job is complete? How is that job going to realize that a separate system in the F-16 is still utilizing that AGE, and the first should not relinquish the AGE on its completion? These process issues had to be addressed in the model to correctly represent AGE usage. Another assumption was made regarding the use of support units by aircraft: only one aircraft can use a unit at one time. Two aircraft cannot share a generator, or a MASS unit, or any other type of support equipment units. This would require modeling the positioning of the aircraft when in repair, a factor that LCOM doesn't address. The IMDE simulations used for this study also do not take this element into account.

To implement these processes, several changes were made to the airbase logistics framework classes. Each aircraft object was given another attribute to record what AGE units are present at that aircraft at any given time. Specifically, this attribute is a matrix, listing each AGE type that could be requested and whether each type is present currently. If a particular piece of AGE is present, the model tracks how many other jobs are sharing that AGE for its subsystem repair. If a piece of AGE is not present, the number of pending requests for that piece needed by subsystems on that aircraft is also tracked. This matrix is dynamically updated during the simulation. Changes were made in the allocation method of the manager to check this matrix each time it was asked to allocate a piece to see if one was really needed or if the requesting subsystem could share an already present piece of AGE. For instance, if a request from WUC 11A00 was received by the AGE Resource Manager for a generator, the manager would first look at the aircraft that contains the requesting subsystem, and look to see if the aircraft currently has a generator present. If these items are present, the manager updates the aircraft's data matrix by changing the counter representing the number of jobs sharing a generator. If they are not present, the manager updates the aircraft's data matrix by changing the number of jobs waiting for a generator; if this is now one, the manager then allocates a generator if one is available.

These changes prevent more than one generator, or any piece of AGE of the same type from being present at an F-16 at any point in the simulation. Similar changes were also needed in the relinquishing process of the manager to look at what is currently present, so the manager would not take away a piece of AGE from an F-16 when another subsystem is still utilizing it. In the above example, if subsystem WUC 11A00 is now finished with its repair process and is ready to give up its generator, it tells the AGE Resource Manager to "take back" the generator. The AGE Manager then looks at the aircraft that contains the finished subsystem, WUC 11A00 and looks at the data matrix of the aircraft to see if there are any other jobs sharing a generator. If other jobs are sharing a generator, the manager decreases the number of jobs in the aircraft's matrix; if there are no other jobs sharing a generator, the manager takes the generator back, updates its own count of how many generators are available, and proceeds to allocate the generator to the first waiting requestor.

These two major modifications in the AGE Resource Manager now model the AGE allocation process in a more realistic sense, thus enhancing the viability and believability of the IMDE model.

Another important design question was, how would a subsystem request a MASS unit in those simulations that combined the functions of certain AGE into the multi-purpose unit? One possibility was to go back to the four-digit task matrix and create a separate column to signify whether a MASS unit was needed for a particular WUC. That database would then have to be converted to LCOM, which would then have to be converted into another large IMDE model. This was considered too inflexible, because for each separate choice of AGE units to be contained in a MASS cart, changes in the four-digit database would have to be made, another conversion to LCOM performed, and another IMDE model created.

The solution implemented was the creation of another data matrix in the AGE Resource Manager. This data matrix consisted first of a row for each AGE and then entries in that row specifying what other AGE pieces could be substituted for it. For example, if a nitrogen cart was to be a function in the MASS unit available for this simulation run, an entry in the "N2CART" row of that matrix would contain the MASS unit. This matrix, called the substitution matrix, could then be read in at run-time by the simulation. Changes in the matrix could be made quickly by a text editor.

Modifications had to be made in the allocation process of the AGE Manager to use this new information. Each request for an AGE by a WUC would now go through the following process:

- The Manager would go through each entry for that AGE on its substitution matrix to see if that entry is present at the F-16. If so, the allocation process detailed above would then be executed, with the present AGE found.
- If no AGE or MASS specified on the substitution matrix is found, the Manager would once again go through the entries to see if any are available; if one is found, the above process is executed with the available AGE or MASS.
- Finally, if nothing is available, a default AGE is specified and the above allocation process is executed requesting the default AGE.

Similar changes are made in the relinquishing process of the AGE Manager to incorporate this information. The end result of these modifications is a resource manager which accurately models the allocation and de-allocation processes present when F-16s are repaired; also, quick edits in a text file can cause different requests for either a specified AGE or the MASS unit, depending on the study. Simulations can now be performed comparing the efficiency of one configuration of the MASS unit to a different one.

Support Equipment Failures

The reliability of the different AGE and MASS units also needs to be modeled. Each unit breaks down based on an exponential distribution with a specified mean time between failures (MTBF). The unit is then repaired for a specified time, drawn from a lognormal distribution with a specified mean time to repair (MTTR). The distributions used for the MTBF and MTTR are LCOM standards and are used as well in the IMDE simulations. During the repair of the piece of AGE, it is unavailable to any subsystems that may request it through the AGE Manager. This logic was implemented in IMDE by having each piece of equipment share MTBF and MTTR values. The user can input these values into the simulation at run-time. At the start of the simulation, the equipment unit draws an exact time of failure based on its failure time parameters. (Actually the first failure time drawn is multiplied by a uniformly drawn real number between 0.0 and 1.0 to simulate "warm-up" of the system. Subsequent draws are done using the mean without such a factor). When the drawn failure time is reached, the failed unit requests a unit of its type from the AGE Manager. The Manager fulfills this request just like any other, and removes this unit of the AGE from its available list. This unit is no longer available to any other requests from other objects in the model. The unit then waits a repair time based on the MTTR and subsequently asks the AGE Manager to take back the unit. This simulates the repair of the unit and it is now made available for other requests in the model.

There are a few assumptions made about the failures of AGE/MASS units. First, it is assumed that all functionality of the equipment is lost when a unit breaks down. This is obvious for a single-functioning AGE unit, but for a multifunctional MASS unit, it is assumed that all functionality of the unit is lost when the system needs repair. Secondly, it is assumed that all breakdowns occur when the unit is not being used by an aircraft - the failure happens after service is completed. There was very little information available about MTBF and MTTR for a proposed MASS unit. After discussions with Air Force personnel, it was decided to model the high- and low-end estimates for the MTBF, which were determined to be 10,000 hours and 100 hours, respectively. Different values for MTTR were used; a more detailed explanation will be presented later in the report.

The result of this change is a more realistic simulation, modeling the unreliability of these mechanical pieces. More missions are aborted because less support equipment is now available to service the F-16s.

Setting Up the Experiments

Once the basic model was built, a large number of parameters had to be set. These parameters were the independent variables for the simulation, and included, among others, quantities of AGE and MASS units, the MTBF and MTTR values for these units, projected sorties per day per aircraft, average sortie duration, flying schedule, mission lead and cancel times, and number of aircraft in the unit, among others. A list is shown below:

- Whether traditional AGE or MASS is used
- Quantities of equipment
- Number of aircraft deployed per squadron (18, 9, 3)

- Defined number of sorties per aircraft per day (2.0 vs 1.5)
- Type of schedule used (burst, random) Lead and cancel times for missions
- The MTBF and MTTR of the equipment
- Quantity of repair staff available to fix broken AGE/MASS units
- Travel time required to transport AGE/MASS from the shop to the aircraft

The run values used for the different experiments for these parameters are listed by individual experiments in Appendix A. Many permutations of these parameters were made and runs repeated for a variety of reasons. For example, quantities of AGE and aircraft were varied due to the changes from the original intended 24 PAA unit to an 18 PAA unit. The number of MASS units was one of the critical parameters to evaluate, since the goal of the study was to determine how many MASS units it would take to support the specified flying schedule. Since it was unable to obtain accurate reliability data for AGE, a high and low value estimate for the MTBF was explored.

LIMITATIONS AND ASSUMPTIONS

Several caveats to the results will be presented. The numbers reported are dependent on the accuracy of the AGE usage information. A particular assumption made was that there were no tasks requiring powered AGE for aircraft that returned "Code 1" (ready to fly). This type of task will generate a lot of requests for AGE, since it would occur on every sortie. The AGE/LCOM task matrix indicated that the AGE was mostly used for unscheduled maintenance and phase work, with the exception that generators were used to do end of day and beginning of day functionality checks and to check for stray missile interface voltage during Integrated Combat Turns (ICTs). These tasks have been incorporated into the model and had no significant effect on sortie production. Other such tasks could have had a significant impact on AGE usage.

Given the size of the task matrix, it is possible that further research and interviewing could significantly improve the accuracy of the matrix. If even a few frequently occurring tasks are added as AGE-required tasks, significant additional AGE usage could be expected, which could impact the number of sorties completed. Similarly, some of the LCOM failure clocks for the unscheduled maintenance network sections may be too high (MTBF values may be too low). Capt. Vincent indicated that the REMIS data he used to construct the four-digit LCOM database may be incomplete. Reduction in LCOM clocks will make those network sections occur more often.

Phase inspections, special inspections, and other use of AGE is not currently modeled. The inspections are not expected to have much impact on AGE usage during a deployment, since many are not done within a 30-day window. Additional non-flying AGE requirements, such as dedicated use of heaters to mess halls, could be significant.

AGE travel time from ready line to aircraft could significantly affect service times. Although this is not much of an issue at a unit like the 178th, where the planes are relatively close, it is apparently not uncommon to have aircraft in separate revetments over 1/4 mile apart. The base in Riyadh, Saudi Arabia had planes dispersed over a 5 mile distance. With taxiway speeds limited to a

maximum of 15 mph, a 20-minute wait for AGE arrival was not uncommon. Travel time consideration is currently being implemented in the model to determine its impact. Another potential bottleneck is the bobtail unit typically used to deliver the AGE to the aircraft. The 178th had two such towing units; the number of drivers available may also be a limiting factor, especially if the planes are widely spaced. These items may need to be treated as resources if talking to other units reveals the same limitations. A self-propelled MASS unit could be of interest in this case.

The assumptions made in dealing with the reliability of the AGE/MASS units have been previously noted. No definite information has been found detailing what MTBF and MTTR values should be used in any Air Force studies. The models here used a high and low bounds of a good estimate for those values. If the true values for mean MTBF and MTTR times are significantly different from those used here, further studies should be undertaken.

The flying schedule can play an overwhelming role in the capability to generate sorties with specified quantities of AGE or MASS. The experiments that varied flying schedule showed that the distribution of sorties was very significant, in some cases having almost as great an effect as the number of sorties in the schedule. A possible scenario to deal with this eventuality might be to have a MASS unit capable of simultaneously supporting two or more aircraft. Implementation of this scenario would depend on the feasibility of locating two aircraft close enough for cabling and hoses, also on how much the MASS unit's size would grow in order to support two aircraft. The current LCOM system takes no account of aircraft spatial parking relationships, although this is something that IMDE could be modified to take into account, as well as addressing the joint usage question.

Usage of AGE by other types of fighters is expected to be somewhat higher than on the relatively modern F-16. Tasks such as engine starting may require AGE on other aircraft, and since these are required even for Code 1 aircraft, contention for AGE could be significantly higher. This effect will probably be seen when we develop a similar set of models for the F-15.

RESULTS AND DISCUSSION

Original implementation of the model used a "fly-when-ready" mission scheduler. This approach generated sorties for any aircraft ready to fly. Since this approach did not generate any sorties when aircraft were not available, none of the simulation runs had any aborted sorties reported. The results essentially consisted of the utilization rates over time of the AGE and MASS units, as well as pending requests for those units. The utilization rates observed were very low for the existing AGE at specified table of allowance quantities. These rates ranged from 26 to 35 percent for the most utilized pieces of AGE.

After considering this result for some time, we concluded that the utilization rate of AGE was of little interest. The rates for all AGE did not approach full capacity, nor were there any long waits for the equipment, which would cause delays in repair. What was required was an answer to the question, "Can we fly all of our assigned sorties with the numbers of AGE or MASS specified?" Since AGE resources were solely studied, other resources were defined to be unconstrained;

manpower and spare parts were always available when needed without waiting time. This question is answered by looking at numbers of aborted sorties, which are not available with the "fly-when-ready" mission generator. Development therefore started on a mission generator that would read a flying schedule and attempt to launch aircraft at specific times identified in that schedule. In order to enable future comparison of this model with an analogous LCOM model, a flying schedule generated by LCOM was used. The mission cancel time was set to 30 minutes, which meant that if the sortie had not been launched within the scheduled takeoff time plus 30 minutes, the sortie would be aborted. We ran 30-day simulations with this mission generator with AGE and with different numbers of MASS units. The first series of experiments was done assuming that MASS would accomplish all functions of the seven pieces of AGE equipment specified earlier. A small set of experiments looked at subset combinations of AGE functionality. Part 1 of the results section looks at the difference between traditional AGE equipment being used with proposed MASS units taking their place; part 2 views different factors that could impact the number of missions being aborted over a 30-day deployment.

Results Part 1

The first part of the results section is the main topic of this report: will the effectiveness of the squadron be diminished if a certain quantity of MASS units were to replace traditional AGE units? The overall result obtained at this point is that MASS units, with functionality of all seven AGE units equal to the number of AM32A-60 generators, would be adequate to sustain a 2.0 sortie rate, with no statistical difference in the number of sorties aborted. This measurement - the number of sorties aborted - is the main metric used to determine the effectiveness of the deployment. The 178th Fighter Group at the Springfield Air National Guard Base had nine AM32A-60s on their "ready line," from which maintenance crews draw AGE. This is consistent with the numbers obtained from the tables of allowance for an 18 PAA UTC, although there is some indication that units will be moving to 15 or 12 PAA, which are allocated more AGE units per aircraft. The only other piece of equipment on the ready line with as many units was the AM32C-10 air conditioner; the 178th also had nine of these. These air conditioning units are often used in combination, since avionics work usually requires power and cooling air. Since the bleed air from the AM32A-60 is used to feed the AM32C-10, (which cools 400° input to 35-50°F), it makes sense to combine these two units. This combination has already been tried with the Ground Power Generator Unit (GPGU), with little success. Table 1 shows AGE quantities for 18 PAA units obtained from four different sources, with the last column being the baseline quantities used in this study (The column labeled ACC reflects numbers obtained from Air Combat Command).

During the course of this project, over 70 different experiments were simulated and analyzed. As previously stated, the primary metric examined to determine adequacy of MASS/AGE combinations is the number of aborted sorties. This measure is the only statistic available that calculates if a certain configuration of MASS or AGE units can support a squadron of fighters trying

to fly a certain schedule. As stated earlier, a variety of parameters were varied for each experiment to help determine correct amounts of MASS units to be deployed and, more importantly, what factors affect the number of aborts in a deployment. Each simulation experiment had a different set

Table 1. AGE Allowances for 18 F-16 PAA

	Hill	Mt	178th	ACC	This
AM32A-60 Generator	9	8	9	9	8
AM32C-10 Air Conditioner	9	8	8	9	8
MC-1A Air Compressor	2	1	2	1	2
MC-2A Air Compressor	4	7	8	4	8
MJ-2A Hydraulic Cart	2	2	4	2	2
N2 Cart	3	2	2	2	2
NF2D Light Cart	14	10	12	9	14

of values for these parameters and was replicated 30 times. Values for the total number of aborted missions for each run were averaged over the 30 runs to get a mean number of aborts for that experiment. Confidence intervals with $\alpha = 0.05$ were computed as well. These intervals determine a range of values in which the true mean lies with a 95% confidence level. Also, for most of the experiments a value was calculated for the average utilization of the MASS unit (in cases where MASS units replace AGE) or the generator (the most requested AGE unit). Confidence intervals were also computed at 95% for utilization values.

The two defined types of flying schedules differ in how the actual missions are planned during the day. A "random" schedule is defined as one that is equally likely to have missions in the night as well as during the day. In an 18 aircraft deployment, with two sorties per mission and a 2.0 schedule, 18 missions are scheduled throughout each day. A "burst" schedule is one that plans all missions to take off within certain hours and groups missions together so multiple missions take off within 10 or 15 minutes. Missions are usually launched between 6 am and 10 pm. This is nearer the type of schedule most often used during a deployment.

The following tables and chart compare like experiments on AGE and MASS equipment, with conclusions drawn from the comparisons. First, in every scenario tested, replacement of all AGE (with quantities defined by the TOA) with 8 MASS units either decreased the number of aborts or had no change at all. Four schedules were tested with 18 aircraft: a 2.0 and a 1.5 burst schedule, and a 2.0 and 1.5 random schedule. The results for those experiments are shown in Table 2 and Figure 5. All other parameters in the experiments listed in Table 2 were kept constant, except for experiments 11 and 19; those had an equipment travel time of 0.25 hours compared to a 0.75 hour time for the others.

The Exp. No. column refers to the identification number of the experiment; all experiments with their parameters used can be found in Appendix A. Figure 5 demonstrates that in those four flying schedules, 8 MASS can adequately replace the existing TOA AGE configuration, since the number of aborted missions drops significantly for one case and is statistically similar in the other three. The confidence intervals calculated for the number of aborts are also found in Appendix A. We concluded that the effectiveness of the squadron will not be diminished when all AGE units are

replaced with eight fully functional MASS units. (This continues on the assumption that the effectiveness of the squadron is determined by the number of sorties flown on time by the aircraft).

Table 2. Comparison of TOA AGE and 8 MASS units

Exp. No.	Type Used	Schedule	% Missions Aborted	Utilization %
11	AGE	2.0 Random	3.3	49.90
19	MASS	2.0 Random	3.2	47.45
42	AGE	2.0 Burst	9.5	63.66
73	MASS	2.0 Burst	7.5	61.30
43	AGE	1.5 Random	0.5	54.28
64	MASS	1.5 Random	0.3	50.69
44	AGE	1.5 Burst	0.3	57.01
84	MASS	1.5 Burst	0.2	52.74

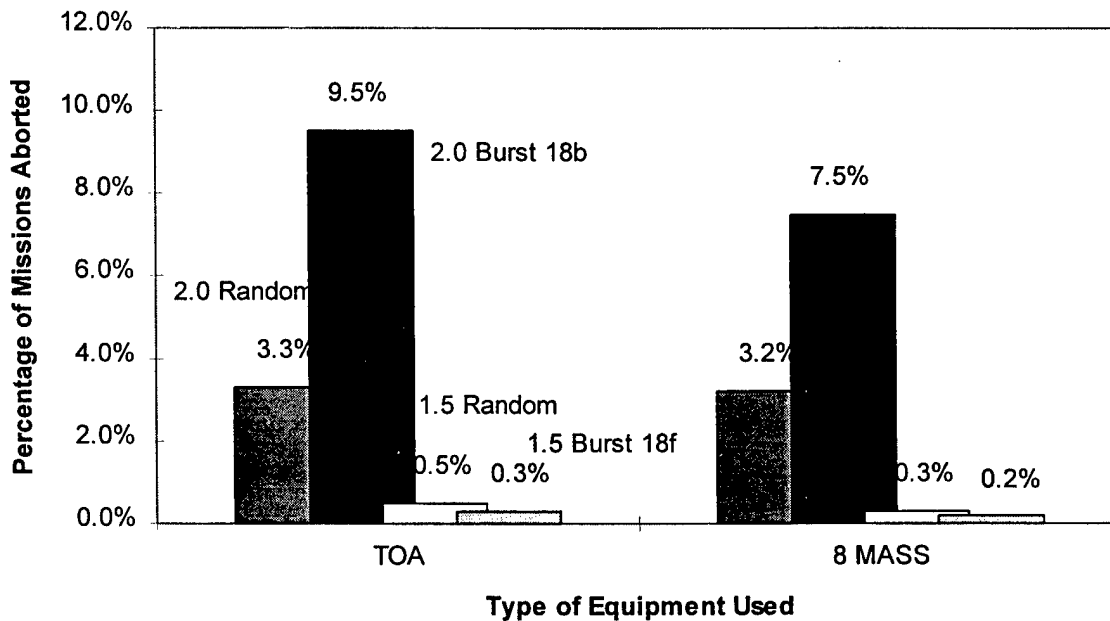


Figure 5
Comparison of TOA and MASS experiments

Abort percentages remain the same or decrease when replacing the units; hence, we recommended that 8 MASS units will support a squadron just as well, or better, than traditional AGE when four different flying schedules are used.

We also noted that the utilization levels drop for the 8 MASS units compared to the busiest traditional AGE unit, the AM32A-60 generator. Although the difference seems small, confidence intervals created show that for each schedule configuration, the MASS units had a statistically significant drop in the utilization rates over the AM32A-60 in a traditional AGE simulation. This

can be said with 95% confidence; the upper and lower utilization values for the intervals can be seen in Appendix A as well. Studies for different quantities of MASS units present will be shown in a following section.

Results Part 2

The above section illustrates that MASS units can replace existing AGE units and perform at the same effectiveness. This part of the results focuses on which other factors present in the deployment may have an effect on the number of aborted missions. We studied some of the independent variables listed above to see what impact each had on the number of aborted missions to allow us to understand the overall process better, to view what factors are critical to the success of the deployment and what factors had little or no impact.

One item we found to have a dramatic effect was the organization of the burst schedule. For a 2.0 sortie schedule, it is difficult to schedule all 18 missions within a certain time period and still have "reasonable" abort rates, i.e. below 10%. The specifics of the five different schedules tried can be found in Appendix C. Eight MASS are present for each experiment with a MTBF of 10,000 hours; a one-way travel time of 0.25 hours is simulated. The abort rates for each of the schedules are listed in Table 3 and shown in Figure 6.

Table 3. Comparison of 18 Aircraft, 2.0 Burst Schedules for 8 MASS Units

Exp. No.	Schedule	% Missions Aborted
16	Burst 18a	12.0
79	Burst 18b	5.7
49A	Burst 18c	17.0
49B	Burst 18d	11.0
49C	Burst 18e	24.7

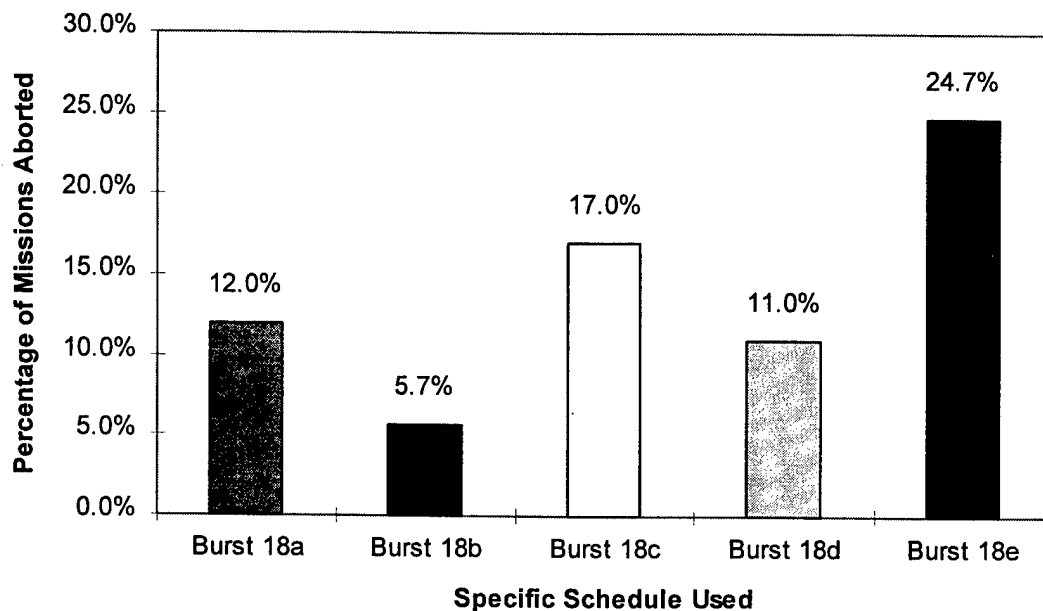


Figure 6.
Comparison of Different 18 Aircraft Burst 2.0 Schedules for 8 MASS units

From the data in Table 3, schedule 18b was chosen for future 18 aircraft burst experiments. If the travel time is increased to the recommended 0.75 hours and the number of MASS unlimited (meaning the number of MASS has no effect on aborts), 6.9% of the missions are still aborted. This is experiment 71 in Appendix A. These aborted missions are solely caused by the schedule. There is simply not enough time to consistently take aircraft that have landed, with one or more failed subsystems, and get them ready for the next batch of missions in five or six hours. Similarly, with a random 2.0 schedule and 18 aircraft, the 2.2% abort rate is the best rate obtained in experiment four (and this is with the travel time defined as 0.0 hours). Also, the above data demonstrates how vital a role the schedule plays in determining abort percentages. Abort rates can double or triple with a few hours difference in launch times; this planning seems to be as important as the support processes of the planes. An application designed to generate a day's schedule given the requirements to reduce aborts might be a very useful tool at the theater planning level. Such a tool would provide more achievable parceling out of Air Tasking Orders to different units.

Another factor affecting abort rates was the travel time involved in transporting support equipment units from the AGE shop to the aircraft in need of repair. Three different scenarios were viewed to see the difference between a time of 0.25 and 0.75 hours. One experiment involved traditional TOA AGE with a 2.0 random schedule, one involved 8 MASS and a burst 2.0 schedule, and a third involved only 3 MASS and a random 1.5 schedule. In all three cases, the number of aborted missions rose dramatically when the travel time increased from 0.25 to 0.75. In each case, the remaining parameters were kept constant. Table 4a and Figure 7 illustrate the differences.

Table 4a. Effect of Variations of Travel Times on Aborts

Exp. No.	Type	Schedule	Travel Time (hrs)	% Missions Aborted
11	TOA AGE	Random 2.0	0.25	3.3
41	TOA AGE	Random 2.0	0.75	6.1
79	8 MASS	Burst 18b 2.0	0.25	5.7
73	8 MASS	Burst 18b 2.0	0.75	7.5
63	3 MASS	Random 1.5	0.25	11.3
67	3 MASS	Random 1.5	0.75	33.5

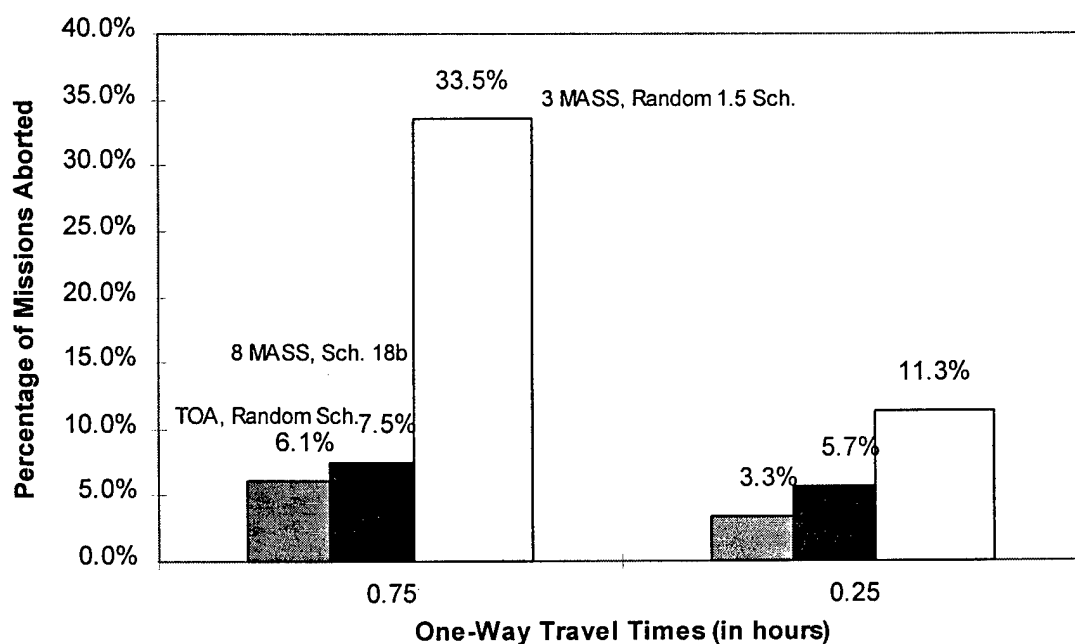


Figure 7.
Varying the Travel Time from 0.75 hours to 0.25 hours.

Similar differences, although not as dramatic, are seen in comparisons between travel times of 0.25 hours and 0.0. Table 4b and Figure 8 shows this difference as well. One conclusion from these results is that any reduction in the delay in bringing equipment to the aircraft will result in increased efficiency. For instance, a reduction in the travel time from 0.75 to 0.50 hours will result in less aborts during the deployment.

Three factors thought to have great effects on the number of aborted missions did not make much difference. The first of these non-influential factors is the mean time between failures (MTBF) of the support equipment units. For this simulation study, the MTBF is defined as the

elapsed clock time between successive failures. This can be loosely translated into usage time hours by multiplying the clock time MTBF by the utilization of the MASS. For instance, in the first case in Table 5, a MTBF of 20 clock hours was defined. If this is multiplied by the utilization for this experiment (49.2%), this results in a MTBF in terms of usage time of 9.84 hours.

Table 4b. Effect of Variations of Travel Times on Aborts

Exp. No	Type	Schedule	Travel Time (hrs)	% Missions Aborted
3	unlimited AGE	Burst 18a 2.0	0.0	10.6
1	unlimited AGE	Burst 18a 2.0	0.25	11.6
4	unlimited AGE	Random 2.0	0.0	2.2
2	unlimited AGE	Random 2.0	0.25	3.1

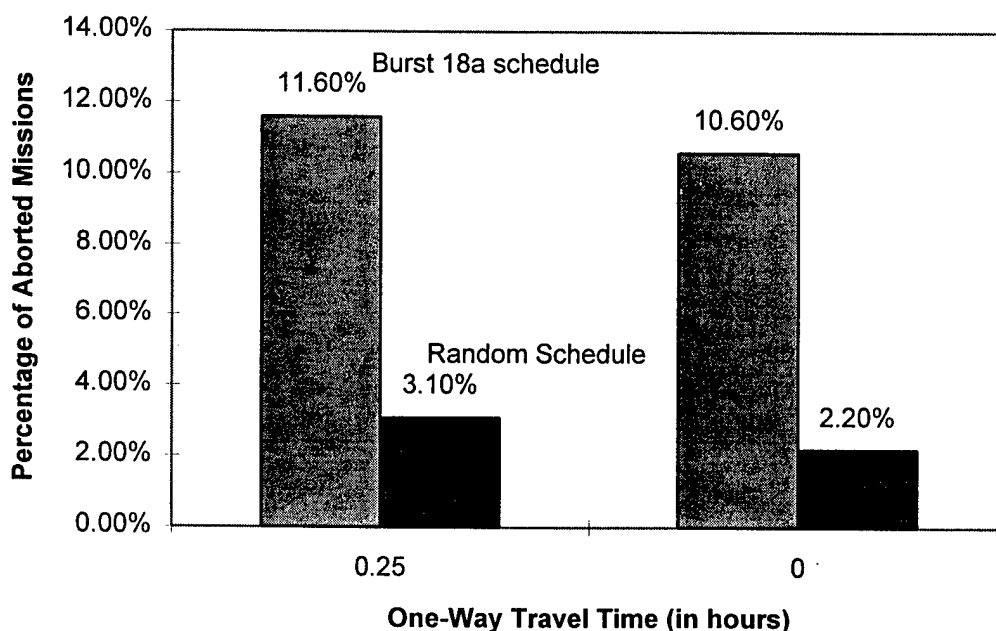


Figure 8.
Varying the Travel Time from 0.25 to 0.0 hours

In two cases, 8 MASS were used to support a squadron flying a random 2.0 schedule and a burst 2.0 schedule, using schedule 18b. For these schedules, the MTBF of the MASS units was defined as 20, 50, 100 or 10,000 hours, depending on the experiment. The MTTR was held at five hours for all the experiments. These variations did not cause a statistically significant effect on the number of aborted missions for either the random or burst schedules. The utilization of the MASS units did slightly increase; however, because down times are included in utilization calculations. Table 5 and Figures 9 (random schedule) and 10 (burst schedule 18b) show no correlation between a decreasing MTBF and any increase in aborted missions. In Table 5, all the random schedule

experiments had a travel time of 0.25 hours, while the experiments with the burst schedule had a 0.75 hour travel time.

Table 5. Variations of the MTBF of the MASS and its effect on Aborts

Exp No.	No. MASS	Schedule	MTBF (hours)	% Missions Aborted	Utilization
54	8	Random 2.0	20	2.7	49.20
55	8	Random 2.0	50	2.9	48.35
17	8	Random 2.0	100	2.6	47.39
20	8	Random 2.0	10000	2.8	46.78
75	8	Burst 18b 2.0	20	8.3	62.80
76	8	Burst 18b 2.0	50	8.5	61.78
73	8	Burst 18b 2.0	100	7.5	61.30
77	8	Burst 18b 2.0	10000	8.1	60.19

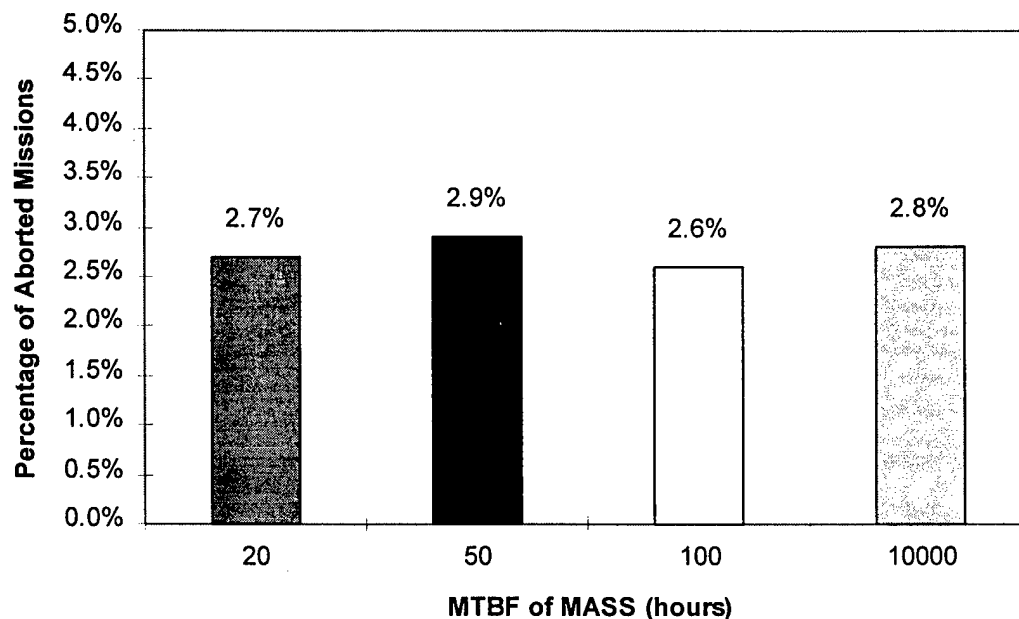


Figure 9.
Variations of MTBF of 8 MASS on a Random 2.0 Schedule

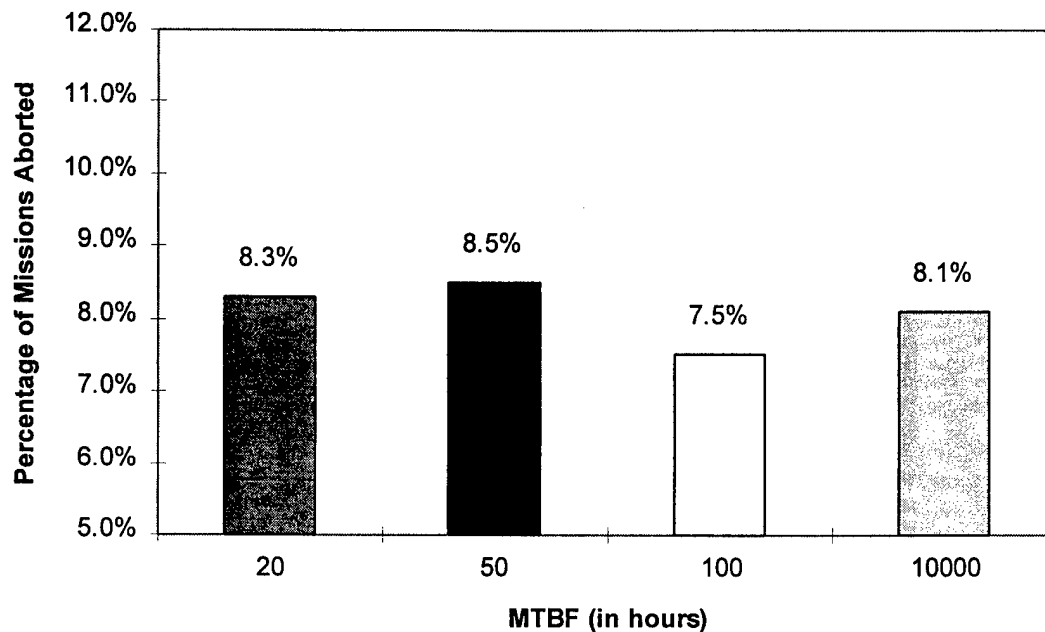


Figure 10.
Variations of MTBF of 8 MASS on a Burst 2.0 Schedule

Another variable that does not have a meaningful effect on the number of abortions is the repair time needed to fix a broken unit. Again, two general cases are studied, one using the random schedule and one with the burst 18b schedule. All of the random schedule experiments have a travel time of 0.25 hours and a MTBF of the MASS unit of 100 hours. The burst experiments have a travel time of 0.75 hours and, to make failures more prominent, a MTBF of 20 hours. There are 8 MASS units available for each simulation to service the 18 aircraft. The end result of this study was a slight increase in the number of aborted missions as the MTTR increased, but not enough to be statistically valid. Table 6 shows the different experiments used to arrive at this conclusion; Figures 11 (for the random schedule) and 12 (burst) graphically depict that an increase in MTTR results in a non-statistically significant increase in the number of abortions. The utilization of the MASS units did increase with increases in MTTR; this can be explained by the inclusion of down times into the utilization calculations.

A third factor not affecting the number of aborted missions was the size of the repair staff available to fix broken equipment. One set of experiments was created to study this issue; a burst schedule using schedule 18a was used with these experiments. The MASS units had a MTBF of 100 hours and a MTTR of five hours. A travel time of 0.25 hours was defined. Three experiments were compared; the number of repairmen available varied from two to five, to an unlimited amount in the three experiments. As shown in Table 7 and Figure 13, the number of repairmen has virtually no effect on abortions. Similar experiments with random schedules instead of burst resulted in the same conclusion.

Table 6. Variations of the MTTR of the MASS and its Effect on Aborts

Exp. No.	# MASS	Schedule	MTTR (hrs)	% Missions Aborted	Utilization
51	8	Random 2.0	2	2.5	46.50
17	8	Random 2.0	5	2.6	47.39
52	8	Random 2.0	10	3.0	47.87
53	8	Random 2.0	20	2.9	49.02
80	8	Burst 18b 2.0	1	8.1	60.91
75	8	Burst 18b 2.0	5	8.3	62.80
81	8	Burst 18b 2.0	8	8.4	63.45

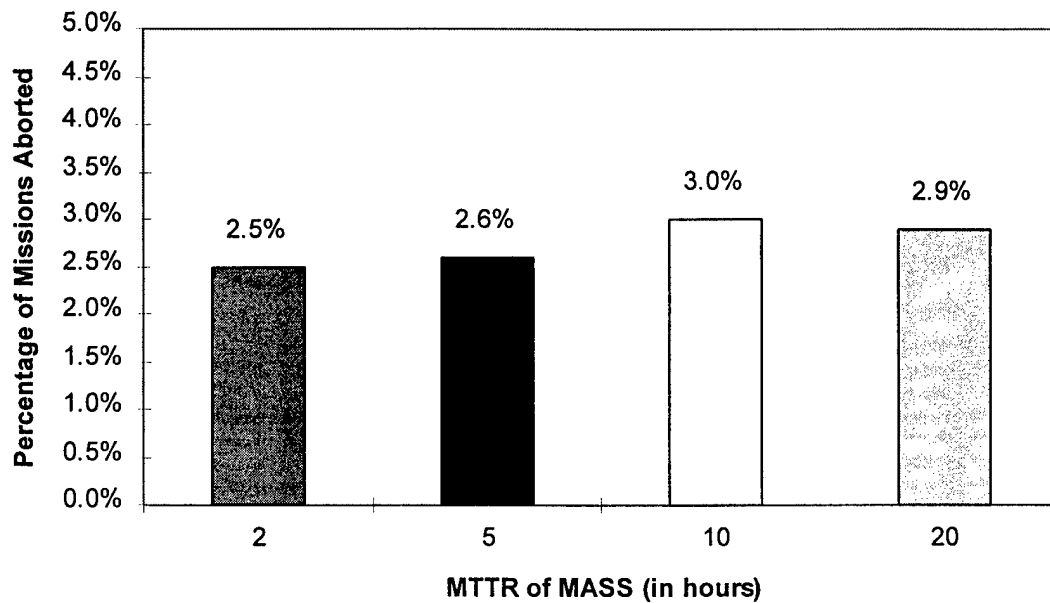


Figure 11.
Variations of MTTR on a Random 2.0 Schedule

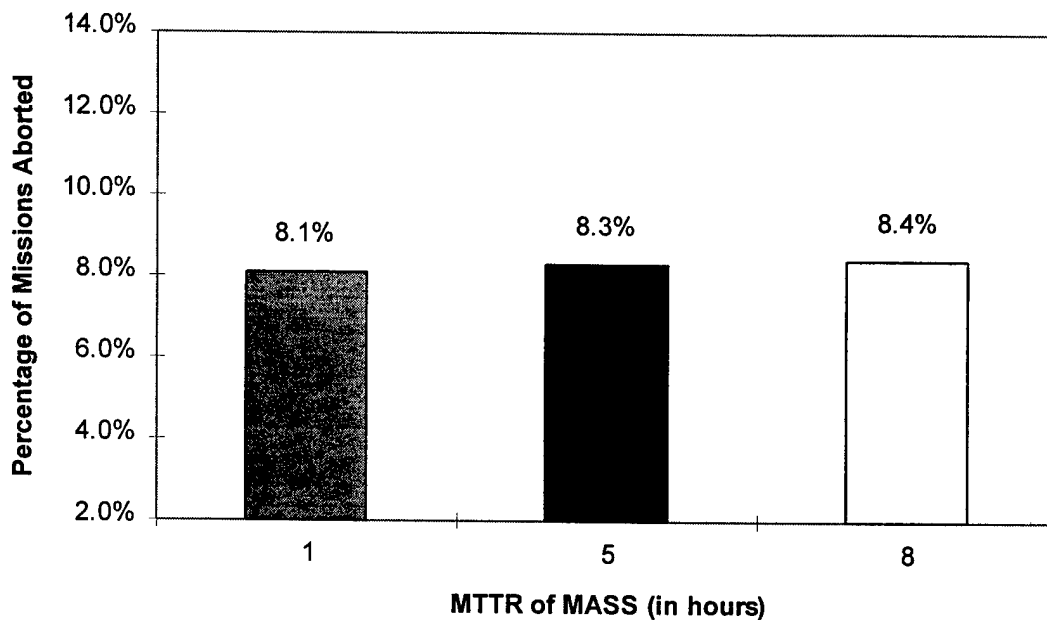


Figure 12.
Variations of MTTR on a Burst 2.0 Schedule

Table 7. Variations of Repair Staff Availability and its Effect.

Exp. No.	Schedule	No. Repairmen Available	% Missions Aborted
13	Burst 18a 2.0	2	12.2
14	Burst 18a 2.0	5	12.0
15	Burst 18a 2.0	unlimited	12.0

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Figure 13.
Variations on the Quantity of the Repair Staff

In this part of the results section we focus on determining the optimal number of MASS units needed to replace TOA AGE for certain schedules. Five different schedules were run, each differing in the sortie generation rate, type of schedule, and number of aircraft in the squadron. Different quantities of MASS units were explored in an attempt to determine where the “cutoff point” was; that is, the point where any more reduction of MASS units would result in a dramatic increase in abort rates. In all of the following experiments, the MTBF of the MASS units is 100 hours and the MTTR is five hours, unless otherwise specified. The MASS cases will also be compared to an unconstrained case and a case using TOA AGE.

The first schedule configuration examined was an 18 aircraft squadron flying a random 2.0 schedule. Travel time for these experiments is defined as 0.25 hours. The scenario was simulated

using 8 MASS units present first, then 6, then 4. The results for each experiment, giving an average number of aborted missions as well as the utilization of the MASS units, are shown in Table 8 and graphically in Figure 14. Also, an experiment with unlimited equipment resources was simulated for comparisons.

Apparently, reducing the number of MASS units for this schedule to 8 or even 6 MASS units would have no adverse effect on the abort percentages. The small differences in the abort percentage between scenarios with unlimited, 8 and 6 MASS units are not statistically significant. However, the utilization of the units increases by 15% when moving from 8 to 6 MASS. If this high utilization rate for 6 MASS units is acceptable, then 6 MASS units are recommended for this schedule; if not, 8 MASS units are the recommended quantity. Deployments with fewer than 6 MASS would see a high increase in the number of aborted missions.

Table 8. Results for a Random 2.0 Schedule for Different Quantities of MASS - 18 Aircraft

Exp No.	No. MASS units	% Missions Aborted	MASS Utilization
2	unlimited	3.1	N/A
19	8	3.2	47.45
21	6	3.6	62.59
22	4	12.5	87.84

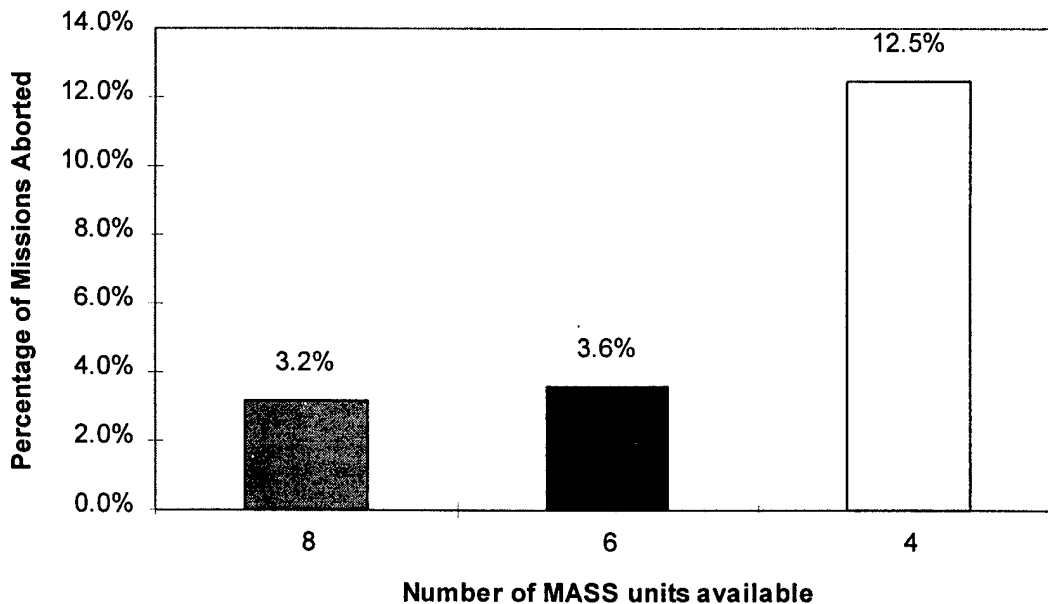


Figure 14.
Variations of Different Quantities of MASS - Random 2.0 Schedule, 18 Aircraft

The next schedule to be explored is the burst 2.0 schedule for an 18 aircraft squadron. As noted earlier, it is critical to choose a schedule that is not too time-constraining. As illustrated in Table 2 and Chart 1, small changes in schedule configurations can result in wide variations in the number of aborted missions. Schedule Burst 18b was chosen to be studied here. An unlimited resource case is compared with experiments having 10, 8 and 6 MASS units. Travel times are defined as 0.75 hours for all of the cases.

Table 9 and Figure 15 summarize the results for these four experiments. Please note that scenarios with unlimited resources and 10 and 8 MASS units have no statistical difference in their number of aborted missions. Again, a steady rise in the utilization of the MASS units is seen as quantities decrease. A deployment with 6 MASS units using this schedule would have close to an 80% utilization rate for the MASS units. For this schedule, 8 MASS units is the preferred quantity. The number of aborts would not statistically differ with more MASS units being available, while the increase in aborts is significant with less MASS available. Deployment with 8 MASS units is recommended for this schedule unless utilization rates are too high; then 9 or 10 units would be preferred.

Table 9. Results for a Burst 2.0 Schedule for Different Quantities of MASS - 18 Aircraft

Exp. No.	No. MASS units	% Missions Aborted	MASS Utilization
71	unlimited	6.9	N/A
72	10	7.1	48.94
73	8	7.5	61.30
74	6	12.4	79.32

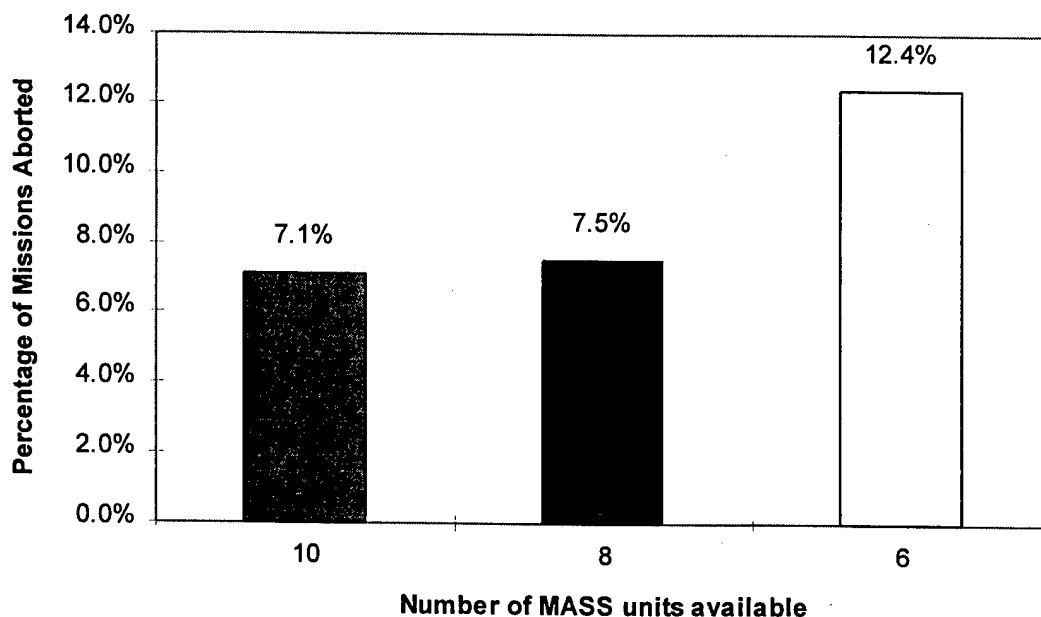


Figure 15.
Variations of Different Quantities of MASS - Burst 2.0 Schedule, 18 Aircraft

The next two sets of experiments reduce the sortie generation rate from 2.0 to 1.5. The purpose of the experiments was to reduce the number of aborted missions to zero, or very close to it. A random 1.5 schedule was created and is evaluated below. Travel times are at 0.75 hours; six experiments were simulated, varying from unlimited resources to only 3 MASS available.

Table 10 and Figure 16 present the results. With unlimited resources, a scenario with this schedule will abort 0.3% of its missions - about one every 30 days. The experiment with 8 MASS units present would still keep this abort rate, but the other four each introduce statistically significant increases in the number of aborted missions. The cutoff point is not well defined for this group, but an experiment with 6 MASS units seems to be the limit. Although it is statistically worse than an 8 MASS scenario, the difference is only two aborts over 30 days, and any other decreases in MASS units would cause a large rise in abort percentages. Therefore, 6 MASS units could be recommended for this schedule, with an abort rate of 0.7% (about one every 10 days), but utilization rates near 70% may not be acceptable.

Table 10. Results for a Random 1.5 Schedule for Different Quantities of MASS - 18 Aircraft

Exp No.	No. MASS units	% Missions Aborted	MASS Utilization
68	unlimited	0.3	N/A
64	8	0.3	50.69
69	6	0.7	69.25
65	5	2.5	81.18
66	4	11.4	94.63
67	3	33.5	98.04

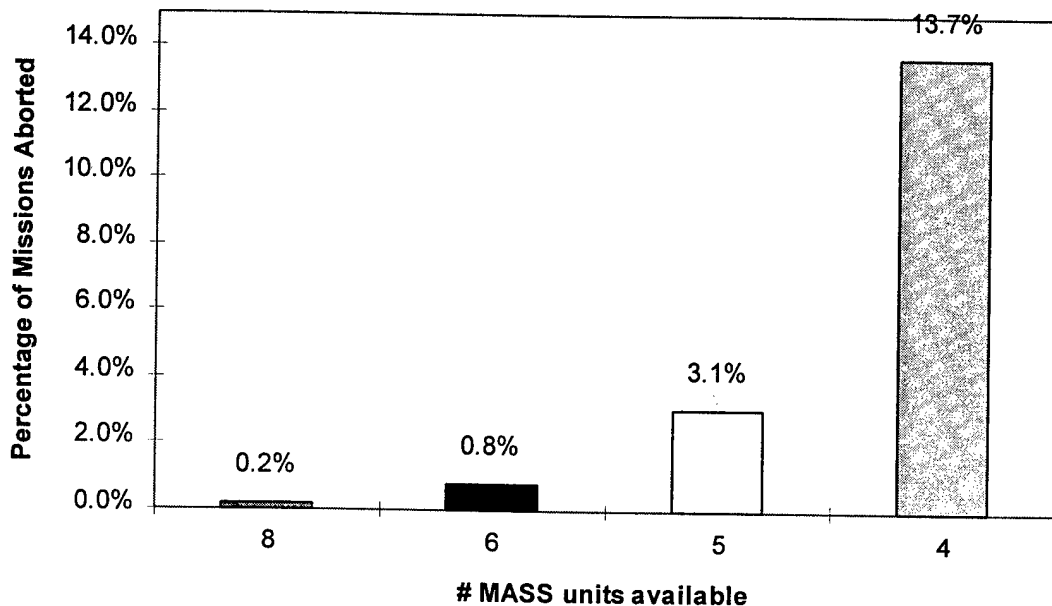


Figure 16.
Variations of Different Quantities of MASS - Random 1.5 Schedule, 18 Aircraft

Finally, a deployment of 18 aircraft utilizing a burst 1.5 schedule was analyzed. The chosen schedule resembling the 2.0 schedule 18b looks awkward scaled down somewhat. Schedule 18f described in Appendix C was chosen for this group of experiments. All other parameters were set to the default values. Five experiments were run, from unlimited resources to 4 MASS units present.

Table 11 and Figure 17 display the numbers generated from the runs. This schedule should not cause any aborts - a scenario with unlimited resources aborts 0.1% of the missions, about one every 60 days - so any aborts seen are due to the unavailability of support equipment. Dropping the quantity of MASS to 8 MASS units caused no statistical change in the aborts, but decreasing to 6 results in small yet statistically significant increases in aborts to 0.8%, about one every nine days. Any further reductions will cause dramatic increases in the abort percentages. It seems that 6 MASS is the cutoff point, but as before, the 70% utilization rate might be too high. In that case, a deployment with 8 MASS would reduce utilization rates to around 52%.

Table 11. Results for a Burst 1.5 Schedule for Different Quantities of MASS - 18 Aircraft

Exp. No.	No. MASS units	% Missions Aborted	MASS Utilization
83	unlimited	0.1	N/A
84	8	0.2	52.74
85	6	0.8	70.72
86	5	3.1	84.09
87	4	13.7	95.91

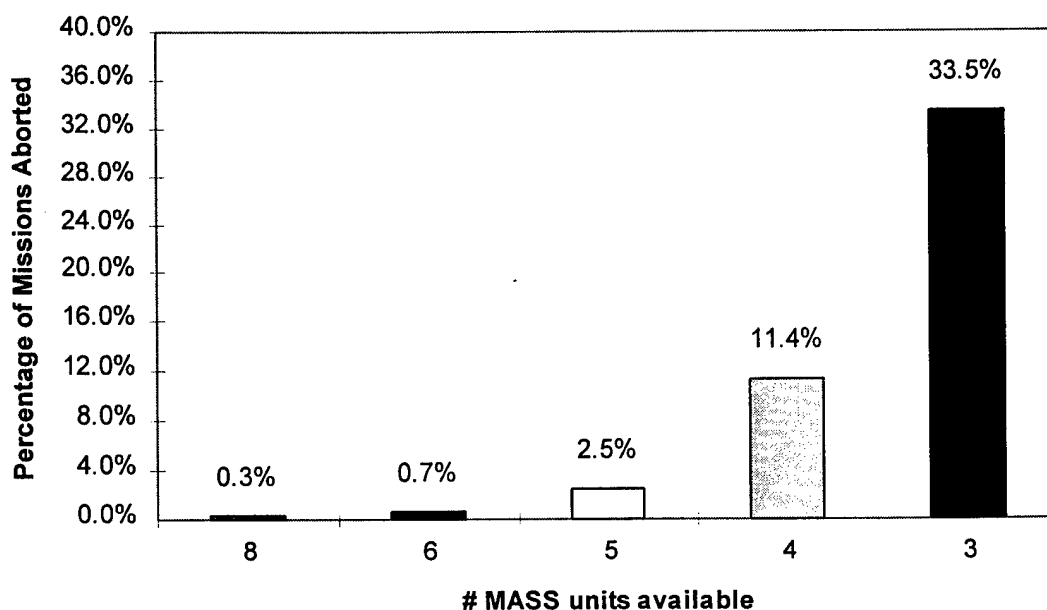


Figure 17.

Variations of Different Quantities of MASS - Burst 1.5 Schedule, 18 Aircraft

The next set of experiments involve a deployment with only nine aircraft instead of the usual 18. A burst 2.0 schedule was needed for this scenario; however, several different schedules were created before one was developed that limited aborts to a reasonable level. As with an 18 aircraft deployment, the schedule choice was critical once again. Experiments 49 D-F and 91-93 detail the results received from various schedules. Schedule 9e was chosen (defined in Appendix C). All other parameters for these simulation experiments are at their default values.

The results from these runs are shown in Table 12 and Figure 18. Despite this schedule being the best created, a simulation run with unlimited resources still results in 8.0% of the missions being aborted. A simulation with 5 MASS units had a 9.7% increase in aborts but not statistically significant from the unlimited case at the 95% confidence level. Simulations with 4 and 3 MASS had a higher abort percentage that was significantly different from the unconstrained case. It is apparent that 5 MASS is the cutoff point for this scenario, keeping the abort percentage relatively low (given the schedule) and also having a low utilization rate.

Table 12. Results for a Burst 2.0 Schedule for Different Quantities of MASS - 9 Aircraft.

Exp. No.	No. MASS Units	% Missions Aborted	MASS Utilization
96	unlimited	8.0	N/A

97	5	9.7	48.07
98	4	11.0	59.50
99	3	16.5	76.72

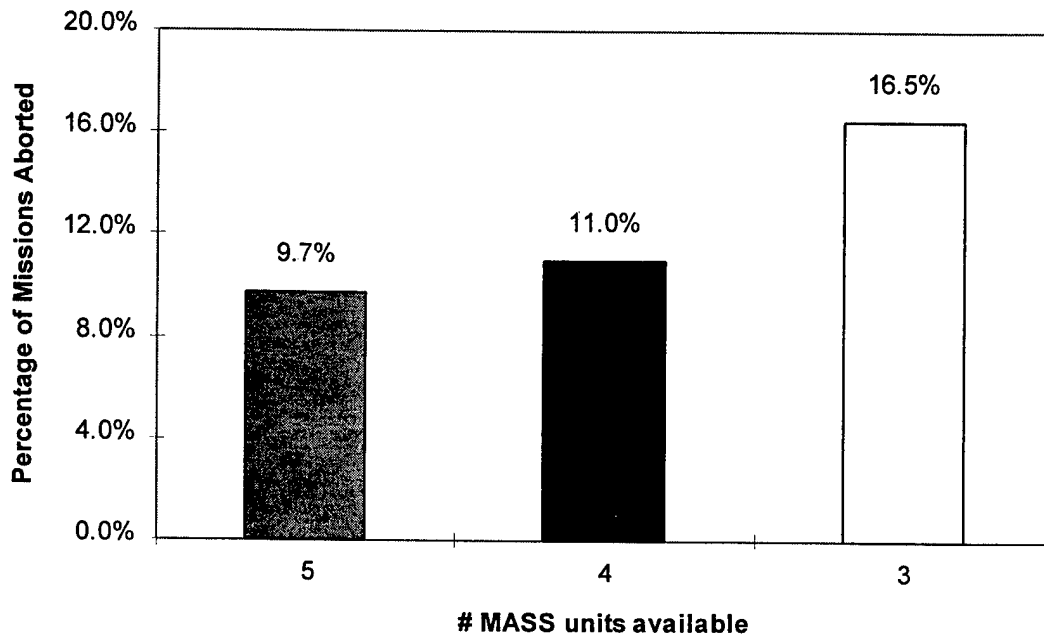


Figure 18.
Variations of Different Quantities of MASS - Burst 2.0 Schedule, 9 Aircraft

One final conclusion can be made about the MASS unit and its functionality. In all of the above experiments, a MASS unit contained full functionality. In other words, the MASS unit contained the functions of all seven AGE being studied - generating power, air conditioning, high and low compressing, hydraulic power, nitrogen service, and lighting. What if only some of those functions were included, and the rest of the services provided by traditional AGE carts? To answer this, one additional configuration of the MASS unit was studied. It was suggested that this second arrangement consist of the MASS unit containing all functions except lighting, which would be provided by one of 14 available NF2D lite-all carts. Both a burst 2.0 and a random 2.0 schedule was run with the new unit, and Table 13 compares this new unit with identical runs with the original MASS configuration.

Schedule 18a was used for the burst schedule in addition to the random 2.0. Travel times were set at 0.25 hours and a MTBF of 100 hours and a MTTR of five hours was defined. There is a very slight improvement in the abort rates, but nowhere near enough to be considered statistically significant. Both configurations work equally as well and both MASS units are candidates to replace traditional AGE units.

Table 13. Comparisons Between Two Configurations of the MASS Unit

Exp. No.	MASS Functionality	Schedule	% Missions Aborted	MASS Utilization
25	all except lights	Burst 18a	11.8	44.19
15	all	Burst 18a	12.0	44.52
29	all except lights	Random 2.0	2.8	47.18
19	all	Random 2.0	3.2	47.45

The simulation results from all of the above indicate that if a MASS unit could be built to replace all AGE functionality, or all AGE functionality except lights, then either of these combinations would be an acceptable substitute for all of the seven pieces of AGE. The quantity of MASS units needed is approximately equal to the table of allowance values for the AM32A-60 generator unit, (eight units). For specific deployments, if the sortie rate is known to be less than 2.0, even fewer MASS units could satisfy the requirements of 18 aircraft.

CONCLUSIONS

Results obtained from simulation experiments run to date support the position that the current AGE could be supplanted with combined MASS units, without adversely affecting sortie generation rate. Part 1 of the Results section highlights this statement. Four different sortie generation schedules were tested, each illustrating that a specified quantity of MASS units will support an 18 PAA deployed unit with a low number of aborts due to MASS. In a traditional 2.0 "burst" schedule, this quantity was found to be eight, meaning that performance will not drop when only eight support equipment units are taken in a 18 aircraft deployment instead of the present 44 AGE units. Additionally, it can be stated with 95% confidence that the utilization of the proposed MASS units will be less than the currently most-requested AGE unit, the AM32A-60 generator. Thirty-six additional support units can now be left behind, dramatically reducing the deployment footprint. Different quantities of MASS were also tested for effectiveness; any amounts more than eight proved redundant and unnecessary; any amounts less than eight resulted in a quick drop-off of the number of missions completed on time as well as a rise in utilization rates.

Results Part 2 highlighted some factors that can dramatically affect abort percentages in a 30-day deployment. The flying schedule setup has a tremendous impact on whether missions have to be aborted. If the schedule is compressed too much, with too many missions scheduled too close together, abort rates rise dramatically. This is principally due to the defined aircraft repair times, rather than the availability of any support equipment. Another element that carried weight in determining the results of the simulation was the amount of time needed to physically transport the equipment from the AGE shop to the aircraft. Three different values were modeled, with a large variation of abort percentages resulting. Any efforts made to decrease these travel times should impact the effectiveness of the deployment. As stated above, the quantities of units taken on a deployment play a large role in determining the success of the deployment.

This report also viewed factors that made very little difference in the number of aborted sorties, including the MTBF and MTTR of the support units, and the number of technicians available to fix the units when needed.

Although simulation results such as these can be helpful in making decisions, it can never be overemphasized that they are but one decision support tool. In this case, there may be several reasons to second guess the results of the simulation. Before mass-producing these units, it makes sense to stage some real-world experiments to make sure no critical processes or tasks have been overlooked. Building enough MASS units to support an 18 PAA package, and using these units during an operational exercise would help validate the unit-level concept (keeping an additional supply of existing AGE units in reserve could protect the exercise from being impacted). An obvious step before building even one unit is the engineering design feasibility of combining AGE functions into a more transportable package.

REFERENCES

1. SA-ALC/LDE, Aerospace Ground Equipment Master Plan, 30 December 1992.
2. Boyle, E. Background Paper on Multi-Function Aerospace Support System (MASS), 30 September 1994.
3. Boyle, E. Multi-Function Aircraft Support System (MASS), briefing charts, undated.

APPENDIX A

SIMULATION RESULTS

Experiments for MASS Study					
Exp No.	0	1	2	3	4
Variable					
Generators	8		4	4	2
A/C units	8		4	4	2
MASS units					
NF2Ds	12	75	14	14	14
NF2 %usage	75	75	75	75	75
travel time(one way)	0.25	0.25	0.25	0.25	0.25
ICT use time	0.25	0.25	0.25	0.25	0.25
powerchecktime	0.25	0.25	0.25	0.25	0.25
Aircraft In Squadron	18	18	18	18	18
Sortie Generation rate	2	1.5	2	2	2
AGE MTTF			100	100	100
AGE MTRR			5	5	5
WUC Clock Factor	1	1	1	1	1
MC2A units	4	4	4	4	4
MJ2A units	2	2	2	2	2
I ² carts	2	2	2	2	2
substitution combinations (below	0	2	0	0	0
number of runs	3	30	3	3	3
Aborted Sorties	68.40	2.00	182.40		
Average Aircraft % NMC	24.31%	19.80%	31.80%		
Generator/MAS Stats:					
Average Waiting Time	0.014	0.081	1.752	same as other	
Average Usage Time	2.238	2.307	2.681	exp 2 data	
Total Requests	1134.67	779.00	1028.67	not collected	
Utilization	0.422	0.489	0.951		
Average Number Pending	0.039	0.088	2.383		
Combinations					
0 No substitutions					
1 All Age Functionality					
2 All Age Functionality except Lights					

APPENDIX B
AGE/LCOM TASK MATRIX FOR 4-DIGIT F-16 DATABASE

F-16C BLK 40/42 LCOM TASKS
AGE USAGE WORKSHEET

LCOM						PERCENTAGE AGE USAGE FOR LCOM TASK								
TASK	TASK DESCRIPTION OR SYSTEM/SUBSYSTEM	AFSC	#	DAY	AVG. TIME	500	MC-1A COMPRS	MC-2A COMPRS	N2 CART	AIR CON	AM32C-10 PWR GEN	AM32A-10 HYDRL	MJ-2A LITE	NF-2D ALL
H11AD1	DOOR FWD BAY RH1202	452X4	1	2	2									
H11A91	NOC	452X4	2	2	2.5									
H11001	AIRFRAME	452X4	3	1	2.5	Y								
H12CA1	CANOPY ASSY	452X4	1	2	0.7									
H12CA2	CANOPY ASSY	454S2	2	2	0.5									
H12EA1	REEL ASSY PWR INERT	452X4	1	5	0.5									
H12001	CREW STATION SYSTEM	452X4	1	1	0.1									
H13F01	NOSE WHL STEER SYS	452X2	2	5	2.5					Y	Y	Y	Y	
H13F02	NOSE WHL STEER SYS	452X5	2	5	1.8					Y	Y	Y	Y	
H13JA1	STRUT SHOCK NLG	452X4	1	15	0.5						Y	Y		
H13LA1	VALVE MLG BRAKE CTL	452X4	1	2	0.5				Y	Y	Y	Y		
H13L01	BRAKE/SKID CONTROL	452X4	3	1	4									
H13L02	BRAKE/SKID CONTROL	452X5	2	5	4.5									
H13L91	NOC	452X4	3	3	1.5									
H13001	LANDING GEAR SYSTEM	452X2	3	1	3							Y		
H14AP1	CMPTD DIG FLGT CNTR	452X2	2	17	1					Y	Y			
H14A01	PRIM FLT CONT ELECT	452X2	2	16	1					Y	Y			
H14A91	NOC	452X2	2	3	1					Y	Y			
H14BA1	INT SERVO ACT RUDD	452X2	2	3	1.2					Y	Y			
H14DL1	LEADING EDGE FLP LH	452X4	1	1	0.5									
H14DM1	LEADING EDGE FLP RH	452X4	1	3	0.5									
H14E01	SPEED BRAKES	452X4	1	4	0.5					Y	Y			
H14FA1		452X2	2	1	2					Y	Y			
H14FG1	TUBE PITOT STATIC	452X2	3	2	8					Y	Y			
H14GA1	MTRX RLY FCS CHN CD	452X2	2	1	2					Y	Y			
H14001	FLIGHT CONTROL SYS	452X2	2	46	3					Y	Y			
H14002	FLIGHT CONTROL SYS	452X5	1	2	0.7					Y	Y			
H14991		452X2	2	1	1					Y	Y			
H24AA1	PWR UN TURBINE EPU	452X5	2	4	0.3									
H24A01	POWER SECTION EPU	452X5	2	2	1.5									
H24DA1	STARTER JET FUEL	452X4	2	2	1				Y	Y	Y			
H24D01	JET FUEL START SYS	452X4	2	2	6									

F-16C BLK 40/42 LCOM TASKS
AGE USAGE WORKSHEET

LCOM	TASK DESCRIPTION OR	AFSC	#	500	AVG.	PERCENTAGE AGE USAGE FOR LCOM TASK				AM32A-10	AM32A-10	MJ-2A	NF-2D
TASK	SYSTEM/SUBSYSTEM			DAY	TIME	MC-1A	MC-2A	N2 CART	AIR CON	PWR GEN	HYDRL		LITE ALL
H24001	AUX POWER PLANT JFS	452X2	2	2	0.5								
H27A91	NOC	452X4	1	6	0.5								
H27ED1	XDUCER NOZZLE POSTN	452X4	2	4	1.5								
H27GD1	AUGMENTOR FUEL SYS	452X4	1	2	2								
H27GP1	ELECTRICAL SYSTEM	452X4	2	16	0.7								
H27Z01	TURBOFAN ENGINE LRU	452X4	1	5	1.1								
H27001	TURBOFAN POWER PLANT	452X4	1	11	1.2								
H27091		452X4	1	1	2								
H271B1	RACK ASSY CONTROL	452X2	2	4	1								
H271B2	RACK ASSY CONTROL	452X4	2	3	2.3								
H27101	ENG INST CTRLS AMS	452X2	1	5	3								
H41AB1	TURBINE COOLING	452X5	2	4	1								
H41A01	AIRCOND SUBSYSTEM	452X5	1	1	1					Y			
H41001	ENVIR CONT SYSTEM	452X5	2	4	1								
H42A91	NOC	452X5	2	2	0.7								
H42GA1	BATTERY AIRCRAFT	452X4	2	3	1					Y			
H42GA2	BATTERY AIRCRAFT	452X5	2	4	1					Y			
H42G01	A/C BATTERY SYSTEM	452X2	2	1	1					Y			
H42G02	A/C BATTERY SYSTEM	452X5	2	10	0.9					Y			
H42G91	NOC	452X5	2	1	0.7					Y			
H44CA1	LIGHT MASTR CAUTION	452X4	2	2	3					Y			
H45AC1	TRANS HYD PRESSURE	452X2	2	3	0.5			Y	Y	Y	Y		
H46B01	REFUEL & DEFUEL SYS	452X4	1	5	1								
H46CN1	RESERVOIR HALON	452S5	2	10	0.5	Y							
H46DG1	TANK VENT	454S3	2	5	0.3								
H46EJ1	INDICATOR FUEL QTY	452X2	2	3	0.5								
H46EK1		452X2	2	1	1					Y			
H46E01	FUEL INDICATING-CON	452X2	2	4	1.3					Y			
H46FD1	TK 370 GAL EXT PYLN	452X2	3	2	7	Y							
H46001	FUEL SYSTEM	452X2	3	36	2								
H46002	FUEL SYSTEM	454S3	3	4	0.9								
H47AA1	CONVERTER LOX 5 LIT	452X4	1	5	1.1								

F-16C BLK 40/42 LCOM TASKS
AGE USAGE WORKSHEET

LCOM	TASK DESCRIPTION OR	AFSC	#	500	PERCENTAGE AGE USAGE FOR LCOM TASK								
TASK	SYSTEM/SUBSYSTEM	452X5	2	DAY	AVG.	MC-1A	MC-2A	N2 CART	AIR CON	AM32C-10	AM32A-10	MJ-2A	NF-2D
H47AD1	REGULTOR OXY BRTHNG	452X2	2	4	1				Y				LITE ALL
H47A01	LIQ OXY SYS SUP&DST	452X2	2	5	1								
H47FD1		452X4	3	3	1.5								
H47001	OXYGEN SYSTEM	452X2	2	4	1								
H51AA1	INDICATOR AIRSP MCH	452X2	2	8	2					Y			
H51AB1	ALTIMETER SERVOED	452X2	2	6	0.8					Y			
H51AF1		452X2	2	1	1					Y			
H51BA1	IND HORIZ SITUATION	452X2	2	4	0.5					Y			
H51B01	ARTIFICIAL REF INSTR	452X2	2	3	1					Y			
H51F01	AIR DATA SYSTEM	452X2	2	1	1					Y			
H51001	FLIGHT INSTRUMENTS	452X2	2	24	2.3					Y			
H55DA1	CRASH SRVLBL MMRY	452X2	2	2	2								
H55DB1	SIGNAL ACQUISTN UN	452X2	3	4	3.8								
H55D01	CRASH SURVIVBL FDRS	452X2	2	4	0.5								
H55001	MALFCT ANLYS REC EQ	452X2	3	1	4.5				Y				
H62A01		452X2	2	4	0.3					Y			
H62CD1	RCVR/XMTR VHF RM MT	452X2	1	2	1					Y			
H62C01	VHF COMM SET	452X2	2	3	0.8					Y			
H62001	VHF COMMUNICATIONS	452X2	2	26	1.2					Y			
H62091		452X2	2	2	1.5					Y			
H63A01		452X2	2	2	1.9					Y			
H63BF1	ANT DUAL BAND LOWER	452X2	2	3	0.5					Y			
H63BL1	R/T1505 AFT TO 1460	452X2	2	72	1					Y			
H63B01	COMM SET UHF	452X2	2	23	1					Y			
H63C01	SYS SEC VOICE COMM	452X2	1	7	0.5					Y			
H63001	UHF COMMUNICATIONS	452X2	2	22	0.9					Y			
H64AC1	GROUND INTERCM STA	452X2	2	4	1					Y			
H64AL1	MESSAGE UNIT VOICE	452X2	2	6	2.5					Y			
H64A01	INTERCOM SET	452X2	2	11	1					Y			
H64001	INTERPHONE SYSTEM	452X2	2	11	1					Y			
H65AA1	RECEIVER TRANSMITTE	452X2	2	1	2				Y				
H65A01	AIR/GROUND IFF SET	452X2	2	6	1.7				Y				

F-16C BLK 40/42 LCOM TASKS
AGE USAGE WORKSHEET

LCOM TASK	TASK DESCRIPTION OR SYSTEM/SUBSYSTEM	AFSC	#	500		PERCENTAGE AGE USAGE FOR LCOM TASK						NF-2D
				DAY	AVG. TIME	MC-1A COMPRS	MC-2A COMPRS	N2 CART	AIR CON	PWR GEN	MJ-2A HYDR	
H71A01	TACAN NAVIGATION SET	452X2	2	13	1.4				Y	Y		
H71B01	INSTRUMENT LAND SET	452X2	2	7	2.1				Y	Y		
H71DA1	RCVR/PROCESSOR GPS	452X2	2	16	1.3				Y	Y		
H71D01	GLOBAL POSNG SYS	452X2	2	69	1.2				Y	Y		
H71001	RADIO NAVIGATION	452X2	2	2	1				Y	Y		
H74AN1	MODULAR LPRF	452X2	2	4	1				Y	Y		
H74AQ1	PROG SIGNL PROCSSR	452X2	2	1	1				Y	Y		
H74A01	FIRE CONT RADAR SET	452X2	2	212	1.2				Y	Y		
H74A91	NOC	452X2	2	12	1.5				Y	Y		
H74BG1		455S0	2	4	0.5				Y	Y		
H74BT1	PDU DEFRACTIVE HUD	452X2	2	12	1.5				Y	Y		
H74BU1	ELCTRN UN DIFF HUD	452X2	2	8	1				Y	Y		
H74BU2	ELCTRN UN DIFF HUD	452X4	1	2	1				Y	Y		
H74B01	HEAD UP DISPLAY SET	452X2	2	39	1.1				Y	Y		
H74B91	NOC	452X2	2	1	2				Y	Y		
H74CE1	GEN AVIONICS COMPTR	452X2	2	2	1				Y	Y		
H74C01	FIRE CONT COMP SET1	452X2	2	13	1.7				Y	Y		
H74DB1	BTTRY STRGE INR NAV	452X2	2	2	1				Y	Y		
H74DF1	INERTIAL NAVIGTN UN	452X2	2	13	1.4				Y	Y		
H74DG1	BATTERY INU	452X2	2	3	1.1				Y	Y		
H74D01	INERTIAL NAVIG SET	452X2	2	82	1.3				Y	Y		
H74D02	INERTIAL NAVIG SET	452X4	3	3	1				Y	Y		
H74GB1	RECORDER A-B VD TP	455S0	2	68	0.8				Y	Y		
H74GC1	PANEL AVTR CONTROL	455S0	2	8	0.9				Y	Y		
H74G01	AIRBORN VIDEO SYS	455S0	2	77	0.9				Y	Y		
H74HB1	DATA TRANSFER CRTGE	452X2	2	7	1				Y	Y		
H74H01	DATA TRANSFER EQUIP	452X2	2	6	1				Y	Y		
H74JB1	POWER SUPPLU DED	452X2	2	2	1				Y	Y		
H74JL1	EXP DAT ENT ELCT UN	452X2	2	4	1				Y	Y		
H74J01	DATA ENTRY CP INTFC	452X2	2	17	0.7				Y	Y		
H74J91	NOC	452X2	2	1	0.5				Y	Y		
H74KE1	MONTR AFT SEAT HUD	455S0	2	2	1				Y	Y		

F-16C BLK 40/42 LCOM TASKS
AGE USAGE WORKSHEET

LCOM	TASK DESCRIPTION OR	AFSC	#	HITS	DAY	500	AVG.	MC-1A	COMPRS	MC-2A	N2 CART	AIR CON	AM32C-10	AM32A-10	MJ-2A	NF-2D
TASK	SYSTEM/SUBSYSTEM	452X2	2	28	1.1							Y				LITE ALL
H74K01	MULTIFCTN DSPLY SET	452X2	2	28	1.1							Y				
H74K91	NOC	452X2	2	1	1.3							Y				
H74LA1	RCVR/XMTR RDR ALT	452X2	2	14	1.1							Y				
H74L01	RADAR ALTIMETER	452X2	2	40	1.6							Y				
H74N01	LNTN TGT AN/AAQ-14	452X2	2	1	1							Y				
H74PH1	ENVRN CNTL UNIT	452X4	2	1	1							Y				
H74PK1	POWER SUPPLY	452X2	2	1	1							Y				
H74P01	NAVIGATIONAL SET	452X2	2	79	1.3							Y				
H74P91	NOC	452X2	2	3	1							Y				
H74W01		452X2	2	4	1							Y				
H74001	FIRE CONTROL SYSTEM	452X2	2	7	2.3							Y				
H75AA1	GUN ASSEMBLY 20MM	462X0	3	3	7.8							Y				
H75A01	GUN SYSTEM	462X0	3	1	1							Y				
H75A91	NOC	462X0	3	4	1							Y				
H75BA1	PYLON WING WEAPONS	462X0	3	3	3.5							Y				
H75CB1	LAUNCHER WING TIP	462X0	3	72	1.1							Y				
H75CJ1	DISP BOMB SUU-20B/A	462X0	3	15	0.5							Y				
H75CK1	RACK EJECT TER-9/A	462X0	3	5	0.5							Y				
H75CL1	LAUNCHR MSL LAU-117	462X0	3	8	0.5							Y				
H75CP1	LNCR MSL UW LAU-129	462X0	3	4	1							Y				
H75DD1	RMTE INT JET-RL SMS	462X0	3	2	0.3							Y				
H75DQ1	INTFC UNIT ENH CTRL	462X0	2	13	0.6							Y				
H75EC1	MATRIX MASTR ARM/RL	462X0	1	1	0.1							Y				
H75J01		452X2	2	4	0.5							Y				
H75001	WEAPONS DELIVERY	452X2	2	5	0.6							Y				
H75002	WEAPONS DELIVERY	462X0	3	31	1.3							Y				
H76BC1	BLNKR UNT ADV INTFC	452X2	2	5	0.8							Y				
H76B01	INTRFRNCE BLNKR SET	452X2	2	10	0.9							Y				
H76CA1	CONTROL INDICATOR	452X2	2	1	1							Y				
H76CC1	ADAPTER ASSY ECM PO	452X2	2	2	0.4							Y				
H76CE1	POD ALQ-131	452X2	2	39	0.8							Y				
H76CG1	SW PADDLE ECM CNSNT	452X2	2	2	1							Y				

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AGE USAGE WORKSHEET

LCOM	TASK DESCRIPTION OR SYSTEM/SUBSYSTEM	AFSC	#	500 DAY	AVG. TIME	PERCENTAGE AGE USAGE FOR LCOM TASK				AM32C-10 AIR CON	AM32A-10 PWR GEN HYDRL	MJ-2A	NF-2D LITE ALL
NAME				HITS		MC-1A COMPRS	MC-2A COMPRS	N2 CART					
H76C01	ECM POD SET	452X2	2	73	1				Y	Y			
H76DA1	PANEL DISPENSER CON	452X2	1	3	6.2				Y	Y			
H76DD1	DISPNSR CHAFF-FLARE	452X2	2	4	1.5				Y	Y			
H76D01	CHAFF-FLARE DISP ST	452X2	2	36	1.3				Y	Y			
H76D02	CHAFF-FLARE DISP ST	462X0	3	3	1.5				Y	Y			
H76EC1	AZIMUTH INDICATOR	452X2	1	2	1				Y	Y			
H76E01	RAD THREAT WARN SET	452X2	2	75	1				Y	Y			
H76W01		452X2	2	1	1				Y	Y			
H91A01	KIT ASSY SURVIVAL	452X4	2	4	0.7								
H97AB1	DET TRNS 16K0341-18	454S2	2	2	0.5								Y
M11AA1	FRAMES	452X4	2	3	2								
M11AB1	RADOME ASSY NOSE	452X4	1	3	0.3								
M11AD1	DOOR FWD BAY RH1202	452X4	2	5	2.3								
M11AS1		452X4	2	3	0.5 Y								
M11A01	NOSE SECTION	452X4	2	3	3 Y								
M11A91	NOC	452X4	1	20	0.7								
M11CB1	DR LWR STRK LH 2101	452X4	1	12	0.7								
M11CD1	COV LWR INLT ST2301	452X4	1	5	1.4								
M11CE1	COV CN HG RM LH2401	452X4	1	1	1								
M11C01	FWD FUSELAGE SEC	458S0	1	2	1 Y								
M11C91	NOC	452X4	1	2	0.7								
M11DA1		452X4	2	2	0.2								
M11DG1		452X4	2	2	1								
M11EA1	FRAMES	452X4	1	2	0.3								
M11EA2	FRAMES	458S0	1	4	1								
M11EB1	DR HY SY B R&A 3101	452X4	1	6	0.2 Y								
M11ED1	DR ECS CMPT LH 3301	452X4	1	17	1.3 Y								
M11EE1	COV AMMO DRUM 3401	462X0	3	3	0.8								
M11E91	NOC	452X4	1	8	0.4								
M11GA1	FRAMES	452X4	2	4	0.5 Y								
M11GB1	DR 7STG BLD CN 4101	452X4	2	1	3 Y								
M11GD1	COV ENG ACC LH 4301	452X4	1	18	1.1								

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AGE USAGE WORKSHEET

LCOM	TASK DESCRIPTION OR	AFSC	#	DAY	500	AVG.	TIME	MC-1A	COMPRS	MC-2A	COMPRS	N2 CART	AIR CON	AM32C-10	AM32A-10	MJ-2A	NF-2D
TASK	SYSTEM/SUBSYSTEM	458S0	1	1	3												
M11GD2	COV ENG ACC LH 4301	452X4	2	4	1.2												
M11GE1	COV FLAPRON ACT4401	452X4	2	1	0.3 Y												
M11G91	NOC	452X4	1	7	0.2 Y												
M11J91	NOC	452X4	1	1	0.5 Y												
M11LA1	BOX WING LH	454S3	2	1	1.5 Y												
M11LA2	BOX WING LH	452X4	2	3	1.1												
M11LC1	SL LLE FLP L-IB5303	454S3	3	3	0.5 Y												
M11LE1	FAIR WR UPR LH 5401	452X4	2	7	0.5 Y												
M11LF1	SL UPR LEF L-IB5407	452X4	2	3	1.4 Y												
M11L01	WING ASSY LEFT	452X4	1	3	0.6 Y												
M11L91	NOC	452X4	1	5	0.5 Y												
M11MA1	BOX WING RH	452X4	1	7	1 Y												
M11MB1	FAIR WGR LWR R6302	452X4	1	11	0.7												
M11MC1	SL LLE FLP R-IB6304	452X4	1	5	0.8												
M11MF1	SL UPR LEF R-IB6408	452X4	1	3	1.8 Y												
M11M01	WING ASSY RH	452X4	1	4	0.4												
M11M91	NOC	452X4	1	94	0.7 Y												
M11001	AIRFRAME	452X5	2	5	2.6 Y												
M11002	AIRFRAME	458S0	1	34	1.1 Y												
M11003	AIRFRAME	462X0	3	7	1 Y												
M11004	AIRFRAME	452X4	1	1	0.7 Y												
M11091		452X4	2	3	1												
M111A1		458S0	1	4	0.7												
M11191		452X4	1	3	0.5												
M119A1		452X2	2	1	3												
M12AA1	PANEL PILOT INSTRMT	452X4	1	11	2												
M12AA2	PANEL PILOT INSTRMT	452X4	2	2	1 Y												
M12AB1	PEDESTAL PILOT	452X4	1	1	0.1												
M12AD1	CONSOLE ASSY AUX RH	452X2	2	4	0.5												
M12AE1	CONSOLE PILOT LH	452X4	2	4	4.8												
M12AE2	CONSOLE PILOT LH	452X4	1	2	1.3 Y												
M12AF1	CONSOLE ASSY RH	452X4	1	2	1.3 Y												

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AGE USAGE WORKSHEET

LCOM						PERCENTAGE AGE USAGE FOR LCOM TASK					
TASK	TASK DESCRIPTION OR	AFSC	#	DAY	AVG.	MC-1A	MC-2A	AIR CON	PWR GEN	MJ-2A	NF-2D
NAME	SYSTEM/SUBSYSTEM			HITS	TIME	COMPRS	COMPRS	N2 CART		HYDRL	LITE ALL
M12AG1	GUIDE ASSY FOOT LH	452X4	2	2	2						
M12AH1	STOW PILOT RLF PACK	452X4	1	2	1 Y						
M12A01	COCKP SUPP STRUCT	452X4	2	3	1.2						
M12A91	NOC	452X2	2	2	1						
M12A92	NOC	452X4	1	6	1						
M12BC1		452X4	2	2	1						
M12CA1	CANOPY ASSY	452X4	1	3	1.5						
M12CA2	CANOPY ASSY	454S2	2	6	3.6						
M12CA3	CANOPY ASSY	458S0	2	3	1.2						
M12CC1	ACTUATOR ASSEMBLY	454S2	3	1	0.3						
M12CE1	TRANSPRCY AFT FIXED	452X4	1	3	3						
M12CF1	SEAL CPY INFLATABLE	452X5	2	1	2						
M12CG2	LEVER CANOPY LOCK	454S2	2	1	1						
M12C91	NOC	452X4	2	2	1						
M12DD1	ACT SW CODE DSTRCT	452X2	2	5	2						
M12D91	NOC	454S2	2	5	1						
M12EA1	REEL ASSY PWR INERT	454S2	2	4	0.7						
M12EE1	CONTROL PITCH STAB	454S2	2	7	2.2						
M12EH1	DROGUE SYSTEM	454S2	2	1	1						
M12EJ2	CYL EMER OXYGEN KIT	454S2	2	2	0.5						
M12E01	EJECTN SEAT ACES II	454S2	2	72	2						
M12E02	EJECTN SEAT ACES II	458S0	1	2	0.3						
M12E91	NOC	452X5	2	2	2.7						
M12001	CREW STATION SYSTEM	452X2	3	4	2.8						
M12002	CREW STATION SYSTEM	452X4	1	11	2.4						
M12003	CREW STATION SYSTEM	452X5	2	4	2						
M12004	CREW STATION SYSTEM	454S2	2	6	1.1						
M12091		462X0	3	1	1						
M13AA1	VALVE MLG SELECTOR	452X2	2	1	1					Y	
M13AB1	HANDLE ALT LG CONTR	452X5	2	2	2					Y	
M13AC1	LIGHT LANDING CONF	452X4	2	2	0.5					Y	
M13AL1		452X4	2	4	2					Y	

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AGE USAGE WORKSHEET

LCOM	TASK DESCRIPTION OR SYSTEM/SUBSYSTEM	AFSC	#	500 DAY	AVG. TIME	PERCENTAGE AGE USAGE FOR LCOM TASK									
TASK	NAME			HITS		MC-1A	COMPRS	MC-2A	COMPRS	N2 CART	AIR CON	AM32C-10	AM32A-10	MJ-2A	NF-2D
M13A01	LANDING GR CONT SYS	452X2	2	4	2.5									Y	LITE ALL
M13A91	NOC	452X2	2	4	1									Y	
M13A92	NOC	452X4	1	2	0.5									Y	
M13BH1		452X4	1	2	0.3									Y	
M13FA1	ACTUATR NW STEERING	452X2	2	2	1							Y		Y	Y
M13FA2	ACTUATR NW STEERING	452X4	2	6	4							Y		Y	Y
M13FA3	ACTUATR NW STEERING	452X5	2	4	1.3							Y		Y	Y
M13F01	NOSE WHL STEER SYS	452X2	2	4	2										
M13F03	NOSE WHL STEER SYS	452X5	2	1	1.5										
M13F91	NOC	452X2	2	8	1.5							Y		Y	Y
M13F92	NOC	452X4	2	2	1							Y		Y	Y
M13GA1	HOOK ARRESTING	452X4	2	2	0.5									Y	
M13GA2	HOOK ARRESTING	452X5	2	1	2.3									Y	
M13G91	NOC	452X2	2	2	2.5									Y	
M13G92	NOC	452X4	1	4	0.5									Y	
M13HA1	AXLE MLG L/H	452X4	1	1	0.5					Y		Y		Y	Y
M13HD1	LIMIT SWITCHES	452X2	2	6	1.3					Y		Y		Y	Y
M13H91	NOC	452X2	1	1	1					Y		Y		Y	Y
M13JA1	STRUT SHOCK NLG	452X4	1	16	0.5									Y	
M13JB1	HYD COMPONENTS	452X4	2	3	1.8									Y	
M13JC1	LIMIT SWITCHES	452X2	3	7	1.8									Y	
M13JC2	LIMIT SWITCHES	452X4	3	4	5									Y	
M13JC3	LIMIT SWITCHES	452X5	2	3	6.5									Y	
M13J91	NOC	452X4	1	2	2									Y	
M13KA1	MLG WHEEL/TIRE ASSY	452X4	1	1	0.8										
M13KB1	NLG WHEEL/TIRE ASSY	452X4	2	2	0.3										
M13LA1	VALVE MLG BRAKE CTL	452X4	1	3	1					Y		Y		Y	
M13LA2	VALVE MLG BRAKE CTL	452X5	2	2	2					Y		Y		Y	
M13L01	BRAKE/SKID CONTROL	452X4	1	2	0.2										
M13001	LANDING GEAR SYSTEM	452X2	2	3	1									Y	
M13002	LANDING GEAR SYSTEM	452X4	2	2	3.8									Y	
M13003	LANDING GEAR SYSTEM	452X5	2	4	2									Y	

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AGE USAGE WORKSHEET

LCOM				500	PERCENTAGE AGE USAGE FOR LCOM TASK								
TASK	TASK DESCRIPTION OR SYSTEM/SUBSYSTEM	AFSC	#	DAY	AVG. TIME	MC-1A COMPRS	MC-2A COMPRS	N2 CART	AIR CON	PWR GEN	AM32C-10	MJ-2A	NF-2D
M13091		452X2	2	2	1							Y	
M14AB1	CONTROLLER STICK	452X2	3	1	1.5				Y	Y			
M14AL1	RECORDER FLCS DATA	452X2	2	5	1.3				Y	Y			
M14AP1	CMPTR DIG FLGT CNTR	452X2	2	21	2.4				Y	Y			
M14A01	PRIM FLT CONT ELECT	452X2	2	12	1.9				Y	Y			
M14A02	PRIM FLT CONT ELECT	452X4	1	2	1				Y	Y			
M14A03	PRIM FLT CONT ELECT	454S2	2	3	2				Y	Y			
M14A91	NOC	452X2	2	6	2.6				Y	Y			
M14A92	NOC	452X4	1	2	0.7				Y	Y			
M14BC1	INTER SERVO ACT FLP	452X4	3	4	3.3				Y	Y	Y		
M14BD1	INTG SRVO ACT SP PN	452X4	1	2	1				Y	Y			
M14B01	PRI FLIGHT CONT ACT	452X4	2	1	1				Y	Y			
M14CA1	RUDDER ASSY	452X4	3	2	7				Y	Y			
M14CB1	HORIZ STABILIZER	452X4	3	9	3.4				Y	Y			
M14CC1	FLAPERON ASSY LH	452X2	3	1	4				Y	Y			
M14CC2	FLAPERON ASSY LH	452X4	2	7	0.8				Y	Y			
M14C01	PRI FLT CONT SURF	452X4	1	1	0.5				Y	Y			
M14C91	NOC	452X4	1	3	0.4				Y	Y			
M14DA1	POWER DRIVE UN ASSY	452X4	2	4	1				Y	Y			
M14DB1	VALVE HYD LEF SHTOF	452X4	3	1	0.5				Y	Y			
M14DG1	SEAL UPPER L/H 5433	452X4	2	17	1.2				Y	Y			
M14DH1	BRK ASSYMETRY LE DR	452X4	1	1	0.3				Y	Y			
M14DL1	LEADING EDGE FLP LH	452X4	1	1	0.5				Y	Y			
M14D01	LEADING EDGE FLAPS	452X4	3	4	2.4				Y	Y			
M14E01	SPEED BRAKES	452X4	2	2	1.5				Y	Y			
M14E02	SPEED BRAKES	452X5	2	6	3				Y	Y			
M14FG1	TUBE PITOT STATIC	452X2	3	4	1.3				Y	Y			
M14F01	AIR DATA	452X2	2	9	2.5				Y	Y			
M14F91	NOC	452X2	2	5	1.5				Y	Y			
M14001	FLIGHT CONTROL SYS	452X2	2	21	1.7				Y	Y			
M14002	FLIGHT CONTROL SYS	452X4	2	1	1				Y	Y			
M14003	FLIGHT CONTROL SYS	458S0	1	6	1				Y	Y			

F-16C BLK 40/42 LCOM TASKS
AGE USAGE WORKSHEET

LCOM				500		PERCENTAGE AGE USAGE FOR LCOM TASK								
TASK	TASK DESCRIPTION OR SYSTEM/SUBSYSTEM	AFSC	#	DAY	AVG. TIME	MC-1A COMPRS	MC-2A COMPRS	N2 CART	AIR CON	AM32C-10	AM32A-10	MJ-2A	NF-2D	
NAME				HITS						PWR GEN	HYDRL	LITE ALL		
M14991		452X2	2	1	7.5				Y	Y				
M21GA1		452X4	2	2	1									
M231B1	RACK PWR BOOST CTRL	452X2	2	2	1.5									
M24AB2	GAS GEN EMER PWR UN	454S3	3	3	6.1									
M24AD1	PUMP HYD EMERGENCY	452X4	1	3	6									
M24A01	POWER SECTION EPU	454S3	2	2	2									
M24A91	NOC	452X4	1	2	0.2									
M24A92	NOC	452X5	2	3	3.3									
M24BA1	TANK ASSY HYDRAZINE	452X4	1	9	0.7									
M24BA2	TANK ASSY HYDRAZINE	452X5	2	1	1.5									
M24BA3	TANK ASSY HYDRAZINE	454S3	3	2	5									
M24BB1	INDICATOR EPU QUAN	452X4	2	1	2.5									
M24BE1	VALVE BA REG SHTFF	452X5	2	3	4.5									
M24B91	NOC	452X4	1	1	1									
M24DA1	STARTER JET FUEL	452X4	2	5	0.5			Y	Y					
M24DB1	FUEL SYSTEM	452X4	2	9	1.9									
M24DC1	CONT JET FUEL START	452X4	2	3	2.3									
M24DD1	DUCT INLET	452X4	2	5	1.2									
M24DD2	DUCT INLET	458S0	2	2	2									
M24DF1	EXCITER IGNITION	452X4	2	1	1					Y				
M24D01	JET FUEL START SYS	452X4	2	5	1.5									
M24D02	JET FUEL START SYS	458S0	1	6	0.8									
M24D91	NOC	452X4	2	2	2									
M24D92	NOC	458S0	1	1	1									
M24EA1	GEARBOX ACCESS DR	452X4	2	9	1.5			Y	Y		Y			
M24EB1	SHAFT POWER TAKEOFF	452X4	3	2	1.8									
M24EB2	SHAFT POWER TAKEOFF	452X4	1	4	1.5									
M24EB2	SHAFT POWER TAKEOFF	458S0	1	4	1.5									
M24EB3	SHAFT POWER TAKEOFF	458S0	1	28	0.5									
M24EC1	DRAIN INSTL ADG	452X4	1	4	2				Y		Y			
M24GA1		452X4	1	2	1									
M24001	AUX POWER PLANT JFS	452X2	3	1	8									

F-16C BLK 40/42 LCOM TASKS
AGE USAGE WORKSHEET

LCOM	TASK DESCRIPTION OR	AFSC	#	500	AVG.	PERCENTAGE AGE USAGE FOR LCOM TASK					
TASK	SYSTEM/SUBSYSTEM			DAY	TIME	MC-1A	MC-2A	N2 CART	AIR CON	PWR GEN	
NAME				HITS		COMPRS	COMPRS				
M24002	AUX POWER PLANT JFS	452X4	3	4	1.5						
M24003	AUX POWER PLANT JFS	458S0	2	2	2						
M27AG1	DRIVE COMPONENTS PTO	458S0	1	6	1.8						
M27A01	ACCESSORY GRBOX ASSY	452X4	3	2	3						
M27A91	NOC	452X4	2	4	2.9						
M27C91	NOC	452X4	3	2	4.9						
M27DB1		452X4	1	2	1						
M27EA1	AUGMENTOR ASSY	452X4	2	15	2.5						
M27EC1	EXHAUST NOZZLE ASSY	452X4	2	27	2						
M27EC2	EXHAUST NOZZLE ASSY	454S0	2	1	2						
M27ED1	XDUCER NOZZLE POSTN	452X4	2	2	1.5						
M27E01	AUG/EXH NOZZLE MMA	452X4	3	4	1.8						
M27GA1	MAIN FUEL SYSTEM	452X4	1	2	1.2						
M27GB1	MNFLD FL FN IGV ACT	458S0	1	1	1						
M27GJ1	LUBRICATION SYSTEM	452X4	2	7	2.5						
M27GM1	HYDRAULIC SYSTEM	452X4	2	10	1.5						
M27GP1	ELECTRICAL SYSTEM	452X4	2	56	1.8						
M27GS1	IGNITION SYSTEM	452X2	2	2	2					Y	
M27GS2	IGNITION SYSTEM	452X4	3	10	2.3					Y	
M27GT1	AIR/ANTI-ICE SYSTEM	452X4	2	3	1.7					Y	
M27G91	NOC	452X4	2	8	1.1						
M27ZA1		452X4	2	5	4						
M27Z01	TURBOFAN ENGINE LRU	452X4	3	9	2.6						
M27Z91	NOC	452X4	1	2	2						
M27001	TURBOFAN POWER PLANT	452X4	2	19	2.7						
M27002	TURBOFAN POWER PLANT	458S0	1	4	1						
M27091		452X4	2	6	3						
M271A1	ENGINE INSTRUMENTS	452X2	2	6	1						
M271A2	ENGINE INSTRUMENTS	452X4	3	3	6						
M271B1	RACK ASSY CONTROL	452X2	2	4	2.5						
M271B2	RACK ASSY CONTROL	452X4	2	7	3.6						
M271B3	RACK ASSY CONTROL	452X5	2	3	3						

F-16C BLK 40/42 LCOM TASKS
AGE USAGE WORKSHEET

LCOM						500				PERCENTAGE AGE USAGE FOR LCOM TASK									
TASK	TASK DESCRIPTION OR			DAY	AVG.	MC-1A	MC-2A	N2 CART	AIR CON	PWR GEN	AM32A-10	MJ-2A	NF-2D						
NAME	SYSTEM/SUBSYSTEM	AFSC	#	HITS	TIME	COMPRS	COMPRS					HYDRL	LITE ALL						
M271B4	RACK ASSY CONTROL	458S0	2	4	0.5														
M271D1	ENGINE MOUNT SYSTEM	452X4	1	4	2														
M271F1	ENG INLET ICE DETCT	452X4	1	3	1.2					Y									
M271F2	ENG INLET ICE DETCT	458S0	1	3	0.5					Y									
M271J1	ENGINE WARNING SYS	452X2	2	2	1					Y									
M271J2	ENGINE WARNING SYS	458S0	1	4	3					Y									
M27101	ENG INST CTRLS AMS	452X2	2	3	1														
M27102	ENG INST CTRLS AMS	452X4	1	2	0.6														
M27191	NOC	452X2	2	2	1.5														
M27192	NOC	452X5	1	2	2														
M32GD1		452X2	2	5	1														
M41AA1	VLV B/A REG SHTF 13	452X4	2	8	3.5					Y									
M41AA2	VLV B/A REG SHTF 13	452X5	2	8	3.6					Y									
M41AB1	TURBINE COOLING	452X2	2	1	1.5					Y									
M41AB2	TURBINE COOLING	452X4	3	6	3					Y									
M41AB3	TURBINE COOLING	452X5	2	3	1					Y									
M41AC1	CONT TEMP CABIN AIR	452X5	2	13	2.8					Y									
M41AD1	VLV RADAR COOL SHTF	452X2	2	5	1					Y									
M41AD2	VLV RADAR COOL SHTF	452X5	1	1	1					Y									
M41A01	AIRCOND SUBSYSTEM	452X2	2	10	1.1					Y									
M41A02	AIRCOND SUBSYSTEM	452X4	2	7	5					Y									
M41A03	AIRCOND SUBSYSTEM	452X5	2	1	1.8					Y									
M41A91	NOC	452X2	2	13	1.6														
M41A92	NOC	452X5	2	17	2														
M41B01	PRESSURIZATION	452X5	1	3	1				Y										
M41B92	NOC	452X4	2	3	0.5														
M41B93	NOC	452X5	2	1	1														
M41CA1	VALVE H-A-T CONTROL	452X5	2	5	3				Y		Y								
M41C01	ANTI-ICE RAM AIR	452X4	2	2	1				Y		Y								
M41C91	NOC	452X4	3	3	1				Y		Y								
M41001	ENVIR CONT SYSTEM	452X2	2	2	2														
M41002	ENVIR CONT SYSTEM	452X4	1	9	1														

F-16C BLK 40/42 LCOM TASKS
AGE USAGE WORKSHEET

LCOM	TASK DESCRIPTION OR	AFSC	#	500	AVG.	PERCENTAGE AGE USAGE FOR LCOM TASK			LCOM TASK		
TASK	TASK DESCRIPTION OR	AFSC	#	DAY	TIME	MC-1A	MC-2A	N2 CART	AIR CON	PWR GEN	MJ-2A
NAME	SYSTEM/SUBSYSTEM	452X5	2	HITS		COMPRS	COMPRS				
M41003	ENVIR CONT SYSTEM	452X2	1	6	2.4						
M41091		452X5	2	3	1						
M41092		452X4	1	4	0.5						
M42AA1	CONSTANT SPEED DRIV	452X5	2	2	2						
M42AA2	CONSTANT SPEED DRIV	452X4	2	2	2.5						
M42AJ1	GEN 10 KVA/FLCS PMG	452X2	3	3	3						
M42AN1	CONVERTER/REGULATOR	452X4	2	2	1						
M42BF1	GENERATOR CONT UNIT	452X2	2	5	1						
M42CA1	PNL ELECT PWR PILOT	452X4	2	4	0.7						
M42D91	NOC	452X5	2	4	1						
M42EA1	MONITOR EXTNL POWER	452X4	2	2	2.2						
M42E91	NOC	452S5	1	1	5.5						
M42GA1	BATTERY AIRCRAFT	452X2	2	1	1						
M42GA2	BATTERY AIRCRAFT	452X4	2	23	1.1						
M42GA3	BATTERY AIRCRAFT	452X5	2	2	2						
M42GA4	BATTERY AIRCRAFT	452S5	1	1	2.5						
M42GB1	CHARGER A/C BATTERY	452X4	1	4	1.3						
M42GC1	BATTERY A/C IN PRF	452X2	2	1	1						
M42GC2	BATTERY A/C IN PRF	452X2	2	4	0.5						
M42GD1	CONTRL UNIT CHARGER	452X5	2	5	1						
M42G01	A/C BATTERY SYSTEM	452X5	2	1	3						
M42G91	NOC	452X4	3	4	7						
M42HC1	BATTERY CONTROL RLY	452X2	2	1	1.5						
M42H91	NOC	452X4	1	9	0.7						
M42001	ELECT POWER SYSTEM	452X0	3	2	1						
M42002	ELECT POWER SYSTEM	452X4	1	50	0.8						
M42991		452X4	2	1	3						
M44AA1	LIGHT TAXI	458S0	1	1	3						
M44AA2	LIGHT TAXI										
M44AA2	LIGHT TAXI										

F-16C BLK 40/42 LCOM TASKS
AGE USAGE WORKSHEET

LCOM	TASK DESCRIPTION OR	AFSC	#	500	AVG.	MC-1A	MC-2A	N2 CART	AIR CON	AM32C-10	AM32A-10	MJ-2A	NF-2D
TASK	SYSTEM/SUBSYSTEM	452X5	2	DAY	HITS	TIME	COMPRS	COMPRS	Y	Y	Y	Y	LITE ALL
M44AA3	LIGHT TAXI	458S0	2	3	1.8								
M44AA4	LIGHT TAXI	452X4	1	5	0.5								
M44AC1	PWR SUP ANTI-COL LT	452X4	1	2	1								
M44A01	EXTERIOR LIGHT SYS	452X4	2	3	0.8								
M44A91	NOC	452X2	2	5	0.8								
M44BC1	LIGHT UTILITY	452X4	2	6	0.8								
M44BD1	LIGHTS THUNDERSTORM	452X4	1	1	0.3								
M44BD2	LIGHTS THUNDERSTORM	452X4	1	2	0.4								
M44BE1	SPOTLGT CP INST/MAP	452X2	2	1	1								
M44B01	INTERIOR LIGHT SYS	452X4	1	1	2								
M44B03	INTERIOR LIGHT SYS	452X5	1	1	2								
M44B04	INTERIOR LIGHT SYS	452X5	2	5	2								
M44B91	NOC	452X4	1	2	1								
M44B92	NOC	452X5	2	3	1.8								
M44CA1	LIGHT MASTR CAUTION	452X4	1	1	0.2								
M44CA2	LIGHT MASTR CAUTION	452X2	2	4	2								
M44CH1	LIGHT 5 MOD 10 FCTN	452X2	2	5	2								
M44C91	NOC	462X0	3	2	1								
M44C93	NOC	452X5	2	1	2								
M44001	LIGHTING SYSTEM	452X4	3	10	2								
M45AA1	PUMP HED SY A P1103	452X4	2	2	1								
M45AC1	TRANS HYD PRESURE	452X4	1	2	0.5								
M45AJ1	FILTER HYD PRESURE	452X4	2	3	1.8								
M45AK1	FILTER HYD RETURN	452X4	1	2	3								
M45A01	HYDRAULIC PWR SUPPL	452X2	2	3	1								
M45A91	NOC	452X4	2	9	0.8								
M45A92	NOC	452X4	2	6	0.6								
M45BA1	RESERVOIR PNEUMATIC	452X4	2	2	2								
M45B91	NOC	452X4	2	4	1								
M45001	HYD AND PNEU SYSTEM	452X4	2										

F-16C BLK 40/42 LCOM TASKS
AGE USAGE WORKSHEET

LCOM	TASK DESCRIPTION OR SYSTEM/SUBSYSTEM	AFSC	#	500 DAY	AVG. TIME	PERCENTAGE AGE USAGE FOR LCOM TASK				LCOM TASK			
NAME	SYSTEM/SUBSYSTEM	AFSC	#	HITS		MC-1A COMPRS	MC-2A COMPRS	N2 CART	AIR CON	PWR GEN	HYDR	MJ-2A	NF-2D
M45002	HYD AND PNEU SYSTEM	458S0	1	2	0.5				Y	Y	Y		
M46AA1	VALVE EXT TANK XFR	452X4	3	2	1								
M46AG1	VLV PRSS RLF XFR PP	452X4	1	2	3								
M46BA1	LAMP AERIAL REFUEL	452X5	2	1	1				Y				
M46BA2	LAMP AERIAL REFUEL	454S3	2	3	1				Y				
M46CA1	VLV VNT/PRESS EX TK	452X5	2	1	1	Y							
M46CA2	VLV VNT/PRESS EX TK	454S3	2	7	4.2	Y							
M46CN1	RESERVOIR HALON	452S5	2	3	1.5	Y							
M46CN2	RESERVOIR HALON	452X4	1	12	1	Y							
M46C01	PRESSURE EXPL SUPPR	452X4	2	1	7	Y							
M46DA1	TANK WING	452X2	2	3	0.5	Y							
M46DA2	TANK WING	452X4	2	3	1.3	Y							
M46DA3	TANK WING	454S3	3	23	5	Y							
M46DB1	TANK FWD BLADDER F1	454S3	3	4	11.7								
M46DE1	TANK AFT A-1	454S3	3	3	8.4								
M46DH1	VALVE WATER DR FUSE	452X2	2	5	1								
M46D01	FUEL TANKS INTERNAL	454S3	2	17	4.5				Y				
M46EA1	PANEL FUEL CONTROL	454S3	3	3	4					Y			
M46EC1	TRANSMITTER FUEL FL	454S3	3	4	10					Y			
M46EG1	CONTROL UNIT FUEL Q	452X2	3	1	2.5					Y			
M46EL1	XMTR FL QTY F1 TK F	452X2	2	3	8					Y			
M46EL2	XMTR FL QTY F1 TK F	452X4	2	1	1					Y			
M46EP1	PNL FUEL PUMP STATS	452X4	1	2	0.2				Y				
M46EV1	LIGHT AERIAL RF IND	452X5	2	3	1					Y			
M46E01	FUEL INDICATING-CON	452X2	3	4	3					Y			
M46E91	NOC	452X5	2	1	0.1				Y				
M46FA1	TANK 370 GALLON EXT	452X4	3	17	2.2	Y							
M46FA2	TANK 370 GALLON EXT	454S3	3	7	5	Y							
M46FB1	PYLON 370 GAL TANK	452X4	2	3	0.5	Y							
M46FC1	DISC EXT TK FL WING	452X4	3	2	2	Y							
M46FC2	DISC EXT TK FL WING	454S3	2	2	2	Y							
M46FD1	TK 370 GAL EXT PYLN	452X4	2	1	1	Y							

F-16C BLK 40/42 LCOM TASKS
AGE USAGE WORKSHEET

LCOM	TASK DESCRIPTION OR	AFSC	#	500	PERCENTAGE AGE USAGE FOR LCOM TASK							
TASK	SYSTEM/SUBSYSTEM	AFSC	#	DAY	AVG.	MC-1A	MC-2A	AM32C-10	AM32A-10	MJ-2A	NF-2D	
NAME				HITS	TIME	COMPRS	COMPRS	N2 CART	AIR CON	PWR GEN	HYDRL	LITE ALL
M46FD2	TK 370 GAL EXT PYLN	452X4	1	2	1 Y							
M46FD2	TK 370 GAL EXT PYLN	458S0	1	2	1 Y							
M46FD3	TK 370 GAL EXT PYLN	454S3	3	5	1.3 Y							
M46FE1	TANK FUEL 300 GAL	452X4	2	8	1.4 Y							
M46FE2	TANK FUEL 300 GAL	454S3	2	3	2 Y							
M46F01	FUEL TANKS EXTERNAL	454S3	2	1	1 Y							
M46001	FUEL SYSTEM	452X2	3	8	1			Y	Y			
M46002	FUEL SYSTEM	452X4	1	4	2			Y	Y			
M46003	FUEL SYSTEM	454S3	3	54	3.6			Y	Y			
M46091		452X4	1	1	0.5			Y	Y			
M47AA1	CONVERTER LOX 5 LIT	452X4	1	1	1							
M47AA2	CONVERTER LOX 5 LIT	452X5	2	10	1.3							
M47AB1	SW OXY LO PRES WRNG	452X4	1	1	0.5			Y	Y			
M47AB2	SW OXY LO PRES WRNG	452X5	2	2	0.1			Y	Y			
M47AD1	REGULATOR OXY BRTHNG	452X2	2	1	2.5			Y	Y			
M47AE1	HOSE OXY SPLY M T R	452X5	2	4	1			Y	Y			
M47A91	NOC	452X2	1	7	0.7							
M47A93	NOC	452X5	2	7	0.9							
M47001	OXYGEN SYSTEM	452X2	2	4	3.5							
M47002	OXYGEN SYSTEM	452X4	2	4	0.4							
M47091		452X4	2	2	1							
M49AA1	CNTRL ALRM BL LN BR	452X5	2	2	1							
M49AB1	EL SENSNG 126 INCH	452X5	3	9	4.3			Y	Y			
M49AB2	EL SENSNG 126 INCH	458S0	1	11	0.6			Y	Y			
M49BB1	EL SEN OVHEAT 71 IN	452X4	1	1	5			Y	Y			
M49CN1		452X4	1	3	1			Y	Y			
M51AA1	INDICATOR AIRSP MCH	452X2	2	3	0.5				Y			
M51A01	PRIMARY FLIGHT INST	452X2	3	8	0.8				Y			
M51BA1	IND HORIZ SITUATION	452X2	2	2	0.8				Y			
M51BC1	TRANSMTR RATE GYRO	452X2	3	4	4				Y			
M51CA1	IND ALT CABIN PRESS	452X4	2	1	3				Y			
M51CB1	CLOCK PILOTS	452X4	1	8	0.9				Y			

F-16C BLK 40/42 LCOM TASKS
AGE USAGE WORKSHEET

LCOM					500	PERCENTAGE AGE USAGE FOR LCOM TASK									
TASK	TASK DESCRIPTION OR				DAY	AVG.	MC-1A	MC-2A		AM32C-10	AM32A-10	MJ-2A	NF-2D		
NAME	SYSTEM/SUBSYSTEM	AFSC	#		HITS	TIME	COMPRS	COMPRS	N2 CART	AIR CON	PWR GEN	HYDRL	LITE ALL		
M51CC1	LIGHT INDEXER AOA	452X2	2		4	1.3					Y				
M51DB1	COMPASS MAGNETIC	452X2	3		6	8					Y				
M51F01	AIR DATA SYSTEM	452X2	3		7	0.5					Y				
M51001	FLIGHT INSTRUMENTS	452X2	2		21	1					Y				
M55AD1	TRANSMITTER SURFACE	452X4	2		11	4									
M55AD2	TRANSMITTER SURFACE	452X4	1		1	1.5									
M55AD2	TRANSMITTER SURFACE	458S0	1		1	1.5									
M55A01		452X2	1		1	0.7									
M55DB1	SIGNAL ACQUISTN UN	452X2	2		7	1									
M55D01	CRASH SURVIVBL FDRS	452X2	3		3	1									
M55F01		452X2	2		1	2									
M55001	MALFCT ANLYS REC EQ	452X2	3		1	2									
M62B01	STATIC PRECIPITATON	452X2	2		3	0.5					Y				
M62B91	NOC	452X2	2		3	1					Y				
M62CA1		452X2	2		2	0.7					Y				
M62CD1	RCVR/XMTR VHF RM MT	452X2	2		4	1					Y				
M62C01	VHF COMM SET	452X2	2		8	1.7					Y				
M62C91	NOC	452X2	2		7	1.5					Y				
M62001	VHF COMMUNICATIONS	452X2	2		23	1.4					Y				
M63A01		452X2	2		4	1.5					Y				
M63BC2	PNL ANTI-ICE/ANTSEL	458S0	2		3	0.3					Y				
M63BE1	ANT DUAL BAND UPPER	452X2	2		6	1					Y				
M63BE2	ANT DUAL BAND UPPER	452X4	1		1	1					Y				
M63BL1	R/T1505 AFT TO 1460	452X2	2		105	1.3					Y				
M63B01	COMM SET UHF	452X2	2		21	1.3					Y				
M63B91	NOC	452X2	2		2	1					Y				
M63CB1	PRCS/ADPTR SEC VOIC	452X2	2		24	0.8					Y				
M63CD1	MATRIX AUDIO SWITCHG	452X2	2		5	2					Y				
M63CE1	RELAY RE-978/ARC	452X2	2		4	1.5					Y				
M63C01	SYS SEC VOICE COMM	452X2	2		64	0.8					Y				
M63C91	NOC	452X2	2		3	0.9					Y				
M63001	UHF COMMUNICATIONS	452X2	2		52	1.4					Y				

F-16C BLK 40/42 LCOM TASKS
AGE USAGE WORKSHEET

LCOM	TASK DESCRIPTION OR SYSTEM/SUBSYSTEM	AFSC	#	DAY	500	AVG. TIME	PERCENTAGE AGE USAGE FOR LCOM TASK					NF-2D		
NAME				HITS			MC-1A	MC-2A	N2 CART	AIR CON	PWR GEN	MJ-2A	HYDRL	LITE ALL
M63631		452X2	2	1	2						Y			
M64AC1	GROUND INTERCOM STA	452X2	2	2	1						Y			
M64AD1	GEN, T/C ENG WARNING	452X2	2	4	0.8						Y			
M64A01	INTERCOM SET	452X2	2	4	1						Y			
M64A91	NOC	452X2	3	3	1.3						Y			
M64001	INTERPHONE SYSTEM	452X2	2	8	1.9						Y			
M65AA1	RECEIVER TRANSMITTE	452X2	2	2	1					Y				
M65AD1	TRANSPONDER COMPUTR	452X2	2	16	0.7					Y				
M65A01	AIR/GROUND IFF SET	452X2	2	14	1.3					Y				
M65A91	NOC	452X2	2	13	0.8					Y				
M69AA1	PANEL ASSY AUDIO 1	452X2	2	5	0.8						Y			
M69001	MISC COMM EQUIP	452X2	3	1	7.5						Y			
M69002	MISC COMM EQUIP	452X4	3	3	1.3						Y			
M71AA1	RCVR XMITTER TACAN	452X2	2	2	0.5					Y				
M71AE1	ANTENNA TACAN UPPER	452X2	2	11	1.3					Y				
M71AE2	ANTENNA TACAN UPPER	452X4	2	3	0.5					Y				
M71A01	TACAN NAVIGATION SET	452X2	3	3	2					Y				
M71A02	TACAN NAVIGATION SET	452X4	1	2	0.5					Y				
M71DA1	RCVR/PROCESSOR GPS	452X2	2	1	1					Y				
M71DD1	ANTENNA ELECT UNIT	452X2	2	1	5.8					Y				
M71DE1		452X2	2	1	1					Y				
M71DF1		452X2	2	1	1					Y				
M71D01	GLOBAL POSNG SYS	452X2	2	73	1					Y				
M71D03	GLOBAL POSNG SYS	462X0	2	1	1					Y				
M71D91	NOC	452X2	2	7	1.5					Y				
M71EA1		452X2	2	1	0.7					Y				
M71001	RADIO NAVIGATION	452X2	2	2	0.5					Y				
M74AA1		452X2	2	1	1					Y				
M74AN1	MODULAR LPRF	452X2	2	3	1					Y				
M74AP1	XMITTER DUAL MODE	452X2	2	2	1					Y				
M74AQ1	PROG SIGNAL PROCSSR	452X2	2	2	1					Y				
M74AU1	WAVEGUIDE ASSY	452X2	1	2	1					Y				

F-16C BLK 40/42 LCOM TASKS
AGE USAGE WORKSHEET

LCOM	TASK DESCRIPTION OR	AFSC	#	500 DAY	AVG TIME	MC-1A COMPRS	MC-2A COMPRS	N2 CART	AM32C-10 AIR CON	AM32A-10 PWR GEN	MJ-2A HYDRL	NF-2D LITE ALL
TASK	SYSTEM/SUBSYSTEM			HITS								
M74A01	FIRE CONT RADAR SET	452X2	2	16	1.5				Y	Y		
M74A02	FIRE CONT RADAR SET	452X4	1	1	3				Y	Y		
M74A91	NOC	452X2	2	2	0.8				Y	Y		
M74A92	NOC	452X4	1	3	0.5				Y	Y		
M74BP2	HUD CONTROL PANEL	452X4	1	2	0.2				Y	Y		
M74BT1	PDU DEFRACTIVE HUD	452X2	2	4	0.5				Y	Y		
M74BV1	GLARESHIELD	452X2	2	1	0.5				Y	Y		
M74BV2	GLARESHIELD	452X4	3	2	1				Y	Y		
M74B01	HEAD UP DISPLAY SET	452X2	2	14	1.2				Y	Y		
M74B91	NOC	452X2	2	1	1				Y	Y		
M74CE1	GEN AVIONICS COMPTR	452X2	2	5	1				Y	Y		
M74C01	FIRE CONT COMP SET1	452X2	2	13	1.6				Y	Y		
M74DA1	INERTIAL NAVIG UNIT	452X2	2	2	1				Y	Y		
M74DF1	INERTIAL NAVIGTN UN	452X2	2	10	1.5				Y	Y		
M74D01	INERTIAL NAVIG SET	452X2	2	53	1.6				Y	Y		
M74G01	AIRBORN VIDEO SYS	452X2	2	2	1.3				Y	Y		
M74G02	AIRBORN VIDEO SYS	455S0	2	5	22.3				Y	Y		
M74H01	DATA TRANSFER EQUIP	452X2	2	5	1				Y	Y		
M74H91	NOC	452X2	2	1	2				Y	Y		
M74JE1	BATTERY DEEU	452X2	2	6	1				Y	Y		
M74JL1	EXP DAT ENT ELCT UN	452X2	2	3	1				Y	Y		
M74J01	DATA ENTRY CP INTFC	452X2	2	24	1				Y	Y		
M74J91	NOC	452X2	2	7	1				Y	Y		
M74K01	MULTIFCTN DSPLY SET	452X2	3	9	13				Y	Y		
M74K02	MULTIFCTN DSPLY SET	452X4	2	2	1				Y	Y		
M74K91	NOC	452X2	2	3	1				Y	Y		
M74LA1	RCVR/XMTR RDR ALT	452X2	3	3	1.6				Y	Y		
M74LE1	CONVERTER SGNL DATA	452X2	2	2	1				Y	Y		
M74L01	RADAR ALTIMETER	452X2	2	5	1				Y	Y		
M74L91	NOC	452X2	2	5	0.5				Y	Y		
M74N01	LNTN TGT AN/AAQ-14	452X2	2	2	8				Y	Y		
M74PB1	TRANSMITTER ASSY	452X2	2	1	4				Y	Y		

F-16C BLK 40/42 LCOM TASKS
AGE USAGE WORKSHEET

LCOM	TASK DESCRIPTION OR	AFSC	#	DAY	AVG. TIME	PERCENTAGE AGE USAGE FOR LCOM TASK				AM32C-10	AM32A-10	MJ-2A	NF-2D
TASK	SYSTEM/SUBSYSTEM			HITS		MC-1A	COMPRS	N2 CART	AIR CON	PWR GEN	HYDR	LITE	ALL
M74PF1	WAVEGUID PRESS UNIT	452X2	2	4	1				Y	Y			
M74P01	NAVIGATIONAL SET	452X2	2	10	2.5				Y	Y			
M74P91	NOC	452X2	3	1	8				Y	Y			
M74Z01	MUX BUSES	452X2	3	4	6.5				Y	Y			
M74Z91	NOC	452X2	2	4	0.5				Y	Y			
M74001	FIRE CONTROL SYSTEM	452X2	3	3	7				Y	Y			
M74091		452X2	2	2	7				Y	Y			
M75AA2	GUN ASSEMBLY 20MM	462X0	3	5	1.3				Y	Y			
M75AB1	DRUM ASSY AMMO	462X0	3	1	1				Y	Y			
M75A01	GUN SYSTEM	452X4	2	3	1				Y	Y			
M75A02	GUN SYSTEM	462X0	3	21	1.3				Y	Y			
M75A91	NOC	462X0	3	8	2.2				Y	Y			
M75BA2	PYLON WING WEAPONS	462S0	1	4	0.5				Y	Y			
M75BA3	PYLON WING WEAPONS	462X0	3	2	2.3				Y	Y			
M75BB1	PYLON CENTERLINE	462S0	1	1	2				Y	Y			
M75BB2	PYLON CENTERLINE	462X0	3	1	0.5				Y	Y			
M75CA1	LAUNCHER UNDERWING	462X0	3	3	1				Y	Y			
M75CB2	LAUNCHER WING TIP	462X0	3	74	1				Y	Y			
M75CJ2	DISP BOMB SUU-20B/A	462X0	3	45	0.9				Y	Y			
M75CK1	RACK EJECT TER-9/A	462S0	1	2	3				Y	Y			
M75CK2	RACK EJECT TER-9/A	462X0	3	8	1				Y	Y			
M75CP1	LNCR MSL UW LAU-129	462S0	1	3	1				Y	Y			
M75CP2	LNCR MSL UW LAU-129	462X0	3	17	0.8				Y	Y			
M75C01	WEAPON RACK SYSTEM	452X4	2	2	0.1				Y	Y			
M75C02	WEAPON RACK SYSTEM	462X0	3	10	0.6				Y	Y			
M75C91	NOC	462X0	3	9	1				Y	Y			
M75DC1		462X0	2	4	0.7				Y	Y			
M75DD1	RMTE INT JET-RL SMS	462X0	3	5	2				Y	Y			
M75DQ1	INTFC UNIT ENH CTRL	462X0	3	6	2.3				Y	Y			
M75D01	STORES MGT SYSTEM	462X0	3	3	2.2				Y	Y			
M75EL1	MTX WG STR 1&9 A908	462X0	3	2	2				Y	Y			
M75001	WEAPONS DELIVERY	452X4	3	3	0.5				Y	Y			

F-16C BLK 40/42 LCOM TASKS
AGE USAGE WORKSHEET

LCOM	TASK DESCRIPTION OR	AFSC	#	500	AVG.	PERCENTAGE AGE USAGE FOR LCOM TASK						
TASK	SYSTEM/SUBSYSTEM			DAY	TIME	MC-1A	MC-2A	N2 CART	AIR CON	PWR GEN	MJ-2A	NF-2D
NAME				HITS		COMPRS	COMPRS				HYDR	LITE ALL
M75002	WEAPONS DELIVERY	462X0	3	62	0.8				Y	Y		
M76BC1	BLNR UNT ADV INTFC	452X2	2	24	1.3				Y	Y		
M76B01	INTRFRNCE BLNR SET	452X2	2	8	0.9				Y	Y		
M76CA1	CONTROL INDICATOR	452X2	2	14	0.9				Y	Y		
M76CC1	ADAPTER ASSY ECM PO	452X2	2	7	1.1				Y	Y		
M76CE1	POD ALQ-131	452X2	2	31	1.1				Y	Y		
M76CE2	POD ALQ-131	452X2	1	1	0.7				Y	Y		
M76CE2	POD ALQ-131	456S1	1	1	0.7				Y	Y		
M76CN1	POD,QRC-80-01(V)	452X2	1	4	0.5				Y	Y		
M76C01	ECM POD SET	452X2	2	68	1.2				Y	Y		
M76C91	NOC	452X2	2	13	1.1				Y	Y		
M76DA1	PANEL DISPENSER CON	452X2	2	4	4.3				Y	Y		
M76DC1	SEQUENCE SWITCH	452X2	3	4	0.7				Y	Y		
M76DD1	DISPNSR CHAFF-FLARE	452X2	3	14	0.8				Y	Y		
M76DE1	EMI FILTER	452X2	2	25	1.2				Y	Y		
M76DF1	SWITCH INITIATING	452X2	2	3	1				Y	Y		
M76DH1	CHAFF PAYLOAD MODUL	452X2	2	5	1.7				Y	Y		
M76DJ1	DSPNSR CHAF-FLR -38	452X2	2	6	0.8				Y	Y		
M76D01	CHAFF-FLARE DISP ST	452X2	2	59	1				Y	Y		
M76D02	CHAFF-FLARE DISP ST	462X0	3	1	0.3				Y	Y		
M76D91	NOC	452X2	2	4	0.6				Y	Y		
M76EA1	INDICATOR CONT PRIM	452X2	2	2	0.5				Y	Y		
M76EG1	SIGNAL PROCESSER	452X2	2	7	1.5				Y	Y		
M76E01	RAD THREAT WARN SET	452X2	2	21	1				Y	Y		
M76W01		452X2	2	8	0.7				Y	Y		
M76W02		456S1	2	5	21.2				Y	Y		
M77001		452X4	2	3	2.2							
M91A01	KIT ASSY SURVIVAL	452X4	2	8	0.1							
M96BA1	STOWAGE LOOSE EQUIP	452X4	1	5	0.4							
M96BA2	STOWAGE LOOSE EQUIP	458S2	1	2	0.5							
R11AA1	FRAMES	452X4	1	1	0.5							
R11AB1	RADOME ASSY NOSE	452X2	3	2	8.6							

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LCOM	TASK DESCRIPTION OR	AFSC	#	HITS	500	AVG	MC-1A	MC-2A	N2 CART	AM32C-10	AM32A-10	MJ-2A	NF-2D
TASK	SYSTEM/SUBSYSTEM	452X4	3	2	4.3								LITE ALL
R11AB2	RADOME ASSY NOSE	452X4	2	6	0.6								
R11AD1	DOOR FWD BAY RH1202	452X4	2	10	3.4								
R11A92	NOC	452X4	2	3	0.8								
R11BD1		452X4	1	5	0.5								
R11B91		452X4	1	13	1.3								
R11CB1	DR LWR STRK LH 2101	452X4	2	4	0.7								
R11CD1	COV LWR INLT ST2301	452X4	1	7	1.9								
R11CE1	COV CN HG RM LH2401	452X4	2	12	0.8								
R11C91	NOC	452X4	1	1	2								
R11EA1	FRAMES	458S2	1	1	0.7								
R11EA2	FRAMES	452X4	3	2	1.4								
R11EE1	COV AMMO DRUM 3401	462X0	2	2	1								
R11EE2	COV AMMO DRUM 3401	452X4	1	6	0.8								
R11E91	NOC	452X4	1	1	1								
R11FE1		452X4	1	41	1.3								
R11GD1	COV ENG ACC LH 4301	452X4	2	7	2								
R11GE1	COV FLAPRON ACT4401	452X4	1	4	0.4								
R11JB1	FAIR FWD LH LO 4431	452X4	1	21	1.6								
R11LC1	SL LLE FLP L-IB5303	452X4	3	3	0.5								
R11LD1	FAIR LWR FLAPRN5305	452X4	2	9	1.4								
R11MC1	SL LLE FLP R-IB6304	452X4	2	9	1.6								
R11MF1	SL UP R LEF R-IB6408	452X4	1	12	0.7								
R11M91	NOC	452X2	3	4	1.8								
R12AA1	PANEL PILOT INSTRMT	452X4	2	5	1								
R12AA2	PANEL PILOT INSTRMT	452X4	2	2	1								
R12AD1	CONSOLE ASSY AUX RH	452X4	3	4	1.4								
R12AE1	CONSOLE PILOT LH	452X4	3	3	4.5								
R12AG1	GUIDE ASSY FOOT LH	452X4	3	4	1								
R12A01	COCKP SUPP STRUCT	452X4	3	4	1								
R12A91	NOC	452X4	1	4	1								
R12BC1		452X4	3	5	6								
R12CA1	CANOPY ASSY	452X4	3										

F-16C BLK 40/42 LCOM TASKS

LCOM				500		PERCENTAGE AGE USAGE FOR LCOM TASK									
TASK	TASK DESCRIPTION OR SYSTEM/SUBSYSTEM	AFSC	#	DAY	AVG. TIME	MC-1A COMPRS	MC-2A COMPRS	N2 CART	AIR CON	AM32C-10 PWR GEN	AM32A-10 MJ-2A	NF-2D			
NAME				HITS							HYDRL	LITE ALL			
R12CA2	CANOPY ASSY	454S2	2	21	4.4										
R12CB1	GEARBOX CNPY MNL DR	452X4	2	5	0.7										
R12CC1	ACTUATOR ASSEMBLY	452X5	1	4	1										
R12CC2	ACTUATOR ASSEMBLY	454S2	2	3	3.4										
R12CE1	TRANSPRCY AFT FIXED	452X4	2	6	5.3										
R12CF1	SEAL CPY INFLATABLE	452X2	2	6	1										
R12C01	CANOPY SUB SYSTEM	452X4	1	3	7.2										
R12C02	CANOPY SUB SYSTEM	452X5	1	4	2										
R12C91	NOC	452X4	1	1	0.5										
R12C92	NOC	452X5	2	4	2										
R12EA1	REEL ASSY PWR INERT	454S2	2	5	3										
R12EC1	HARNES REC/SLG REL	454S2	2	6	4.5										
R12EG1	PARACHUTE ASSY	452X4	2	5	0.8										
R12EJ1	CYL EMER OXYGEN KIT	452X4	2	1	0.3										
R12Z91	NOC	454S2	2	6	1										
R12091		452X4	1	3	2										
R13AA1	VALVE MLG SELECTOR	452X2	2	4	1.3						Y				
R13AA2	VALVE MLG SELECTOR	452X4	3	8	4.5						Y				
R13AA3	VALVE MLG SELECTOR	452X5	2	11	2.9						Y				
R13AC1	LIGHT LANDING CONF	452X2	2	2	7						Y				
R13AC1	LIGHT LANDING CONF	452X5	2	2	7						Y				
R13AD1		452X2	2	1	2						Y				
R13A91	NOC	452X4	2	5	1.7						Y				
R13C91	NOC	452X4	2	2	1										
R13DB1	NLG WHEEL&TIRE ASSY	452X4	2	2	2										
R13FA1	ACTUATR NW STEERING	452X2	2	3	1				Y		Y	Y			
R13FA2	ACTUATR NW STEERING	452X4	1	13	1.7				Y		Y	Y			
R13FA3	ACTUATR NW STEERING	452X4	1	1	8				Y		Y	Y			
R13FA3	ACTUATR NW STEERING	454S4	1	1	8				Y		Y	Y			
R13FA4	ACTUATR NW STEERING	452X5	2	10	3.3				Y		Y	Y			
R13FU1		452X4	1	4	1.5				Y		Y	Y			
R13F91	NOC	452X2	2	3	1				Y		Y	Y			

F-16C BLK 40/42 LCOM TASKS
AGE USAGE WORKSHEET

LCOM						PERCENTAGE AGE USAGE FOR LCOM TASK							
TASK	TASK DESCRIPTION OR SYSTEM/SUBSYSTEM	AFSC	#	DAY	AVG. TIME	MC-1A COMPRS	MC-2A COMPRS	N2 CART	AM32C-10 AIR CON	AM32A-10 PWR GEN	MJ-2A HYDRL	NF-2D LITE ALL	
R13F92	NOC	452X4	1	4	0.7					Y	Y	Y	
R13HA1	AXLE MLG L/H	452X4	3	7	2.7				Y	Y	Y	Y	
R13HA2	AXLE MLG L/H	452X4	2	4	1				Y	Y	Y	Y	
R13HA2	AXLE MLG L/H	458S2	2	4	1				Y	Y	Y	Y	
R13HB1	LINK MLG DWN LCK L/H	452X4	2	8	3.3				Y	Y	Y	Y	
R13HC1	HYD COMPONENTS	452X4	1	6	1.8				Y	Y	Y	Y	
R13HD1	LIMIT SWITCHES	452X2	2	3	1				Y	Y	Y	Y	
R13HD3	LIMIT SWITCHES	452X5	2	1	4				Y	Y	Y	Y	
R13H91	NOC	452X4	2	3	1.1				Y	Y	Y	Y	
R13JA1	STRUT SHOCK NLG	452X4	2	7	3.5						Y		
R13JB1	HYD COMPONENTS	452X4	1	9	3.5						Y		
R13JC1	LIMIT SWITCHES	452X2	2	3	4.6						Y		
R13JC2	LIMIT SWITCHES	452X4	2	2	6						Y		
R13JC3	LIMIT SWITCHES	452X5	2	4	4						Y		
R13J91	NOC	452X4	1	1	0.5						Y		
R13KA1	MLG WHEEL/TIRE ASSY	452X4	2	15	1.1								
R13KB1	NLG WHEEL/TIRE ASSY	452X4	2	8	1								
R13LA1	VALVE MLG BRAKE CTL	452X2	2	3	1				Y	Y	Y		
R13LA2	VALVE MLG BRAKE CTL	452X4	2	116	2.3				Y	Y	Y		
R13LA3	VALVE MLG BRAKE CTL	452X5	2	9	4.8				Y	Y	Y		
R13LE1		452X4	2	2	1				Y	Y	Y		
R13L01	BRAKE/SKID CONTROL	452X4	1	13	1.4				Y	Y	Y		
R13L91	NOC	452X4	3	1	2.6				Y	Y	Y		
R14AA1	COMPUTER FLIGHT CONT	452X4	1	1	1				Y	Y			
R14AB1	CONTROLLER STICK	452X2	2	13	2.7				Y	Y			
R14AB2	CONTROLLER STICK	462X0	2	2	4				Y	Y			
R14AC1	LINK RUDD PLT CONT	452X4	3	1	1.8				Y	Y			
R14AE1	PANEL MANUAL TRIM	452X2	2	15	1.2				Y	Y			
R14AF1	ACCEL NORM LATERAL	452X2	3	4	4				Y	Y			
R14AG1	RATE GYRO FLT CNTRL	452X2	3	2	7				Y	Y			
R14AL1	RECORDER FLCs DATA	452X2	2	5	1.5				Y	Y			
R14AP1	CMPTD DIG FLGT CNTR	452X2	2	198	2				Y	Y			

F-16C BLK 40/42 LCOM TASKS
AGE USAGE WORKSHEET

LCOM						PERCENTAGE AGE USAGE FOR LCOM TASK							
TASK	TASK DESCRIPTION OR SYSTEM/SUBSYSTEM	AFSC	#	DAY	500 HITS	AVG. TIME	MC-1A COMPRS	MC-2A COMPRS	N2 CART	AIR CON	AM32C-10 PWR GEN	AM32A-10 MJ-2A HYDRL	NF-2D LITE ALL
R14AP2	CMPTR DIG FLGT CNTR	452X4	2	2	2	3				Y	Y		
R14AQ1	PANEL DIG FLGT CTRL	452X2	3	2	2	3				Y	Y		
R14A91	NOC	452X2	2	7	2	2.3				Y	Y		
R14BA1	INT SRVO ACT RUDD	452X4	3	7	4	5				Y	Y		
R14BB2	INTG SRVO ACT HR TL	452X4	2	5	7	8				Y	Y	Y	
R14BC1	INTER SRVO ACT FLP	452X4	3	1	5	1				Y	Y	Y	
R14BD1	INTG SRVO ACT SP PN	452X4	2	1	3					Y	Y		
R14B91	NOC	452X4	2	2	2					Y	Y		
R14CB1	HORIZ STABILIZER	452X4	2	5	1	5				Y	Y		
R14CC1	FLAPERON ASSY LH	452X4	3	17	3	6				Y	Y		
R14C91	NOC	452X4	2	6	0	8				Y	Y		
R14DG1	SEAL UPPER L/H 5433	452X4	2	55	1	4				Y	Y		
R14D91	NOC	452X4	3	9	1					Y	Y		
R14ED1	SPEEDBRAKE LWR SRFC	452X4	3	6	5					Y	Y		
R14EF1	IND SPEED BRAKE	452X5	2	5	1	5				Y	Y		
R14E01	SPEED BRAKES	452X4	1	2	1	5				Y	Y		
R14E91	NOC	452X4	3	3	1					Y	Y		
R14FC1	PNEU SENSOR ASSY	452X2	2	7	1					Y	Y		
R14FE1	MONITOR PROBE HEATR	452X2	2	5	1	3				Y	Y		
R14FF1	TUBE AIR DATA	452X2	2	2	2					Y	Y		
R14FG1	TUBE PITOT STATIC	452X2	3	10	4	4				Y	Y		
R14FK1	XMITTER AOA DFCS	452X2	2	7	2					Y	Y		
R14GA1	MTRX RLY FCS CHN CD	452X2	2	1	2					Y	Y		
R15DA1		452X2	2	4	1								
R231B1	RACK PWR BOOST CTRL	452X2	2	2	2								
R24AA1	PWR UN TURBINE EPU	452X2	2	3	2								
R24AA2	PWR UN TURBINE EPU	452X5	2	10	2	8							
R24AD1	PUMP HYD EMERGENCY	452X4	2	2	8								
R24A01	POWER SECTION EPU	452X4	2	3	1								
R24A91	NOC	452X5	2	2	3								
R24BA1	TANK ASSY HYDRAZINE	452X4	1	12	0	6							
R24BE1	VALVE BA REG SHTFF	452X2	2	5	1	5							

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AGE USAGE WORKSHEET

LCOM	TASK DESCRIPTION OR	AFSC	#	500	AVG.	PERCENTAGE AGE USAGE FOR LCOM TASK					
TASK	SYSTEM/SUBSYSTEM			DAY	TIME	MC-1A	MC-2A	N2 CART	AIR CON	PWR GEN	NF-2D
NAME				HITS		COMPRS	COMPRS			HYDR	LITE ALL
R24BE2	VALVE BA REG SHTF	452X4	2	8	4.2						
R24BE3	VALVE BA REG SHTF	452X5	2	3	2						
R24B91	NOC	452X4	1	1	0.2						
R24CA1	PANEL EPU SEL SW	452X4	2	4	4						
R24CB1	CONTROLLER EPU	452X5	1	4	0.2			Y	Y		
R24DA1	STARTER JET FUEL	452X4	2	18	4.8			Y	Y		
R24DB1	FUEL SYSTEM	452X4	2	4	3.3						
R24DC1	CONT JET FUEL START	452X4	2	20	1.8						
R24DD1	DUCT INLET	452X4	2	6	0.8						
R24DE1	MOTOR HYD START	452X4	2	2	2.8						
R24DF1	EXCITER IGNITION	452X4	2	9	1.4				Y		
R24D01	JET FUEL START SYS	452X4	3	2	3.1						
R24D91	NOC	452X4	2	4	1.6						
R24EA1	GEARBOX ACCESS DR	452X4	2	11	5.6			Y	Y	Y	
R24EB1	SHAFT POWER TAKEOFF	452X4	2	8	1.6						
R24E91	NOC	452X4	1	2	5						
R27AC1	SEAL DRAIN SYSTEM	452X4	1	2	1						
R27AG1	DRIVE COMPONENTS PTO	452X4	1	10	2.8						
R27A01	ACCESORY GRBOX ASSY	452X4	3	2	8						
R27A91	NOC	452X4	2	16	2.1						
R27B91	NOC	452X4	2	2	4						
R27DG1		452X4	2	2	2						
R27EA1	AUGMENTOR ASSY	452X4	3	7	6.5						
R27EC1	EXHAUST NOZZLE ASSY	452X4	2	59	2.7						
R27ED1	XDUCER NOZZLE POSTN	452X4	1	23	3.8						
R27E01	AUG/EXH NOZZLE MMA	452X4	3	6	7						
R27E91	NOC	452X4	3	4	6						
R27GA1	MAIN FUEL SYSTEM	452X4	3	7	2.8						
R27GA2	MAIN FUEL SYSTEM	458S0	2	3	6						
R27GD1	AUGMENTOR FUEL SYS	452X4	2	9	3.2						
R27GD2	AUGMENTOR FUEL SYS	454S3	3	1	6						
R27GH1	TUBE TORQUE	452X4	2	2	2						

F-16C BLK 40/42 LCOM TASKS
AGE USAGE WORKSHEET

LCOM	TASK DESCRIPTION OR	AFSC	#	500	AVG. TIME	MC-1A	MC-2A	N2 CART	AIR CON	AM32C-10	AM32A-10	MJ-2A	NF-2D
TASK	SYSTEM/SUBSYSTEM			DAY	HITS	COMPRS	COMPRS			PWR GEN	HYDR		LITE ALL
R27GJ1	LUBRICATION SYSTEM	452X4	1	5	1								
R27GP1	ELECTRICAL SYSTEM	452S5	2	1	9								
R27GP1	ELECTRICAL SYSTEM	452X4	2	1	9								
R27GP2	ELECTRICAL SYSTEM	452X4	2	55	3								
R27GS1	IGNITION SYSTEM	452X4	2	20	2.2				Y				
R27GT1	AIR/ANTI-ICE SYSTEM	452X4	2	29	1.8				Y				
R27G91	NOC	452X4	2	9	2.3								
R27Z01	TURBOFAN ENGINE LRU	452X4	3	50	5.1								
R27Z91	NOC	452X4	3	1	5								
R27001	TURBOFAN POWR PLANT	452X4	2	21	2.2								
R27002	TURBOFAN POWR PLANT	452X4	2	3	4.5								
R27002	TURBOFAN POWR PLANT	458S0	2	3	4.5								
R27091		452X4	1	1	0.5								
R271A1	ENGINE INSTRUMENTS	452X2	2	11	1.6								
R271A2	ENGINE INSTRUMENTS	452X4	2	2	0.5								
R271B1	RACK ASSY CONTROL	452S5	1	3	7								
R271B1	RACK ASSY CONTROL	452X4	1	3	7								
R271B2	RACK ASSY CONTROL	452X2	2	32	1.8								
R271B3	RACK ASSY CONTROL	452X4	2	18	3.7								
R271B4	RACK ASSY CONTROL	462X0	2	2	2								
R271D1	ENGINE MOUNT SYSTEM	452X4	1	1	1								
R271F1	ENG INLET ICE DETCT	452X4	2	40	1.7				Y				
R271J1	ENGINE WARNING SYS	452X4	2	2	4				Y				
R27101	ENG INST CTRLS AMS	452X4	2	4	0.8								
R27191	NOC	452X4	1	1	5								
R33GA1		452X4	2	3	1								
R41AA1	VLV B/A REG SHTF 13	452X2	2	16	1.6				Y				
R41AA2	VLV B/A REG SHTF 13	452X4	2	4	2				Y				
R41AA3	VLV B/A REG SHTF 13	452X5	2	13	4.8				Y				
R41AA4	VLV B/A REG SHTF 13	454S3	3	2	2				Y				
R41AB2	TURBINE COOLING	452X5	2	6	1.6				Y				
R41AC1	CONT TEMP CABIN AIR	452X2	2	1	2				Y				

F-16C BLK 40/42 LCOM TASKS
AGE USAGE WORKSHEET

LCOM	TASK DESCRIPTION OR	AFSC	#	500	PERCENTAGE AGE USAGE FOR LCOM TASK									
TASK	SYSTEM/SUBSYSTEM	AFSC	#	DAY	AVG.	MC-1A	MC-2A	N2 CART	AIR CON	AM32C-10	AM32A-10	MJ-2A	NF-2D	
NAME				HITS	TIME	COMPRS	COMPRS			PWR GEN	HYDRL		LITE ALL	
R41AC2	CONT TEMP CABIN AIR	452X5	2	6	2.5					Y				
R41AD1	VLV RADAR COOL SHTF	452X2	2	2	1.3					Y				
R41AD2	VLV RADAR COOL SHTF	452X4	2	2	1					Y				
R41AD3	VLV RADAR COOL SHTF	452X5	3	2	1.1					Y				
R41AE1	PANEL AIRCOND CONT	452X5	2	7	2.3					Y				
R41A01	AIRCOND SUBSYSTEM	452X5	2	4	1.8					Y				
R41A91	NOC	452X2	2	6	1.3									
R41A92	NOC	452X5	2	18	1.5									
R41BB1	VALVE PRESS REG	452S5	1	2	2				Y					
R41BB1	VALVE PRESS REG	452X5	1	2	2				Y					
R41B91	NOC	452X5	2	4	3									
R41DB1		452X4	3	2	3									
R41091		452X2	2	1	5.1									
R41991		452X5	2	3	1									
R42AA1	CONSTANT SPEED DRIV	452X5	2	17	2.5									
R42AC2	FLTR MAIN GEN/CSD	452X5	3	2	6									
R42AD1		452X4	1	4	4									
R42AF1		452X2	2	4	0.5									
R42AG1		452X4	1	3	0.7									
R42AJ1	GEN 10 KVA/FLCS PMG	452X2	2	4	3									
R42AJ2	GEN 10 KVA/FLCS PMG	452X5	2	17	2.5									
R42AK1	FREQ CONVTR 10 KVA	452X2	2	3	1									
R42AN1	CONVERTER/REGULATOR	452X2	2	11	2.6									
R42A01	AC GEN DRIVE ASSY	452X4	1	1	1									
R42A91	NOC	452X2	2	1	1									
R42BD1	GEN CNTRL UN 10 KVA	452X2	2	2	2									
R42BD2	GEN CNTRL UN 10 KVA	452X5	2	3	3									
R42BF1	GENERATOR CONT UNIT	452X2	2	1	2				Y					
R42BF2	GENERATOR CONT UNIT	452X4	2	1	5				Y					
R42B91	NOC	452X4	2	4	1				Y					
R42CA1	PNL ELECT PWR PILOT	452X2	2	4	0.3				Y					
R42CA2	PNL ELECT PWR PILOT	452X4	1	2	0.7				Y					

F-16C BLK 40/42 LCOM TASKS
AGE USAGE WORKSHEET

LCOM	TASK DESCRIPTION OR	AFSC	#	500	AVG.	MC-1A	MC-2A	N2 CART	AIR CON	AM32C-10	AM32A-10	MJ-2A	NF-2D
NAME	SYSTEM/SUBSYSTEM			DAY	HITS	COMPRS	COMPRS			PWR GEN	HYDR		LITE ALL
R42CA3	PNL ELECT PWR PILOT	452X5	2	4	2					Y			
R42CG1		452X4	1	2	0.2					Y			
R42DA1	CNTCTR AC PWR 40KVA	452X5	2	1	5.5					Y			
R42DC1	PNL O/P #1 ECM RH S	452X2	2	1	1					Y			
R42FA1	CONVERTER 28 VDC	452X2	2	1	0.2								
R42GA1	BATTERY AIRCRAFT	452S5	1	2	1					Y			
R42GA2	BATTERY AIRCRAFT	452S5	3	5	1.5					Y			
R42GA2	BATTERY AIRCRAFT	452X4	3	5	1.5					Y			
R42GA3	BATTERY AIRCRAFT	452X2	2	1	1					Y			
R42GA4	BATTERY AIRCRAFT	452X4	2	189	0.9					Y			
R42GB1	CHARGER A/C BATTERY	452X5	2	9	3					Y			
R42GC1	BATTERY A/C IN PRF	452X4	2	34	0.8					Y			
R42GD1	CONTRL UNIT CHARGER	452X2	2	27	1.2					Y			
R42GD3	CONTRL UNIT CHARGER	452X5	2	4	2.3					Y			
R42G01	A/C BATTERY SYSTEM	452X4	2	8	1.3					Y			
R420A1		452X4	1	1	4								
R44AA2	LIGHT TAXI	452X4	1	95	1.2					Y			
R44AA3	LIGHT TAXI	452X5	1	3	2.5					Y			
R44AC1	PWR SUP ANTI-COL LT	452X4	3	3	0.2					Y			
R44AC2	PWR SUP ANTI-COL LT	452X5	2	1	1.5					Y			
R44A01	EXTERIOR LIGHT SYS	452X4	1	2	0.8					Y			
R44A11		452X4	1	2	0.1					Y			
R44A91	NOC	452X4	2	2	2					Y			
R44A92	NOC	452X5	2	4	5					Y			
R44BA1	PANEL INT LIGHT CNT	452X4	2	6	1					Y			
R44BA2	PANEL INT LIGHT CNT	452X5	2	6	1					Y			
R44BB1	PNL EXT LIGHT CONT	452X2	2	3	1					Y			
R44BB2	PNL EXT LIGHT CONT	452X4	2	2	2					Y			
R44BC1	LIGHT UTILITY	452X2	1	5	1					Y			
R44BC2	LIGHT UTILITY	452X4	1	15	0.6					Y			
R44BE1	SPOTLGT CP INST/MAP	452X4	1	3	0.8					Y			
R44B01	INTERIOR LIGHT SYS	452X2	1	1	0.5					Y			

F-16C BLK 40/42 LCOM TASKS
AGE USAGE WORKSHEET

LCOM	TASK DESCRIPTION OR	AFSC	#	500	AVG.	PERCENTAGE AGE USAGE FOR LCOM TASK							
TASK	SYSTEM/SUBSYSTEM			DAY	TIME	MC-1A	MC-2A	N2 CART	AIR CON	PWR GEN	MJ-2A		
NAME				HITS		COMPRS	COMPRS				HYDR	LITE	ALL
R44B91	NOC	452X4	2	7	0.9					Y			
R44B92	NOC	452X5	2	3	1					Y			
R44CA1	LIGHT MASTR CAUTION	452X2	2	23	1					Y			
R44CA2	LIGHT MASTR CAUTION	452X4	2	4	1.5					Y			
R44CA3	LIGHT MASTR CAUTION	452X5	2	3	3.3					Y			
R44CB1	LIGHT CAUTION PANEL	452X2	1	3	1.5					Y			
R44CB2	LIGHT CAUTION PANEL	452X5	3	1	4					Y			
R44CH1	LIGHT 5 MOD 10 FCTN	452X2	3	3	4					Y			
R44C01		452X4	2	1	0.8					Y			
R45AA1	PUMP HED SY A P1103	452X4	2	18	3.5			Y	Y	Y	Y		
R45AC1	TRANS HYD PRESSURE	452X2	3	2	8			Y	Y	Y	Y		
R45AC2	TRANS HYD PRESSURE	452X4	2	9	2.8			Y	Y	Y	Y		
R45AC3	TRANS HYD PRESSURE	452X5	2	4	5			Y	Y	Y	Y		
R45AE1	VALVE HYD PRESS REL	452X4	3	7	1.5			Y	Y	Y	Y		
R45AH1	RESERVOIR HYD 800CI	452X4	2	4	3.2			Y	Y	Y	Y		
R45AJ1	FILTER HYD PRESURE	452X4	3	2	9			Y	Y	Y	Y		
R45AK1	FILTER HYD RETURN	452X4	1	7	3.7			Y	Y	Y	Y		
R45A01	HYDRAULIC PWR SUPPL	452X4	2	1	1.5			Y	Y	Y	Y		
R45A91	NOC	452X4	2	13	2			Y	Y	Y	Y		
R45BA1	RESERVOIR PNEUMATIC	452X4	3	1	3			Y	Y	Y	Y		
R45B91	NOC	452X4	2	4	2			Y	Y	Y	Y		
R46AB1	PUMP WING SCAVANGE	454S3	2	4	5	Y							
R46AC1	PUMP TRANSFER ELECT	454S3	2	3	4.3	Y							
R46AP1	HEAT EXCH FUEL/OIL	454S3	2	2	6.4	Y							
R46AQ1	DISC FILTER&ENG CPL	454S3	3	2	6	Y							
R46AV1	VALVE SHTF FUEL EEC	454S3	2	4	3	Y							
R46A91	NOC	452X4	2	8	1.7	Y							
R46A92	NOC	454S3	2	1	2	Y							
R46BQ1	ADAPTER GRND DEFUEL	454S3	2	2	1	Y							
R46BR1	ADAPTER GRD REFUEL	454S3	2	2	0.5	Y							
R46BW1	VALVE FLOAT WING	454S3	3	2	8	Y							
R46CA1	VLV VNT/PRESS EX TK	454S3	3	9	4.2	Y							

F-16C BLK 40/42 LCOM TASKS
AGE USAGE WORKSHEET

LCOM	TASK DESCRIPTION OR		500	AVG.	PERCENTAGE AGE USAGE FOR LCOM TASK						
TASK		AFSC #	DAY	TIME	MC-1A	MC-2A	N2 CART	AIR CON	AM32C-10	AM32A-10	NF-2D
NAME	SYSTEM/SUBSYSTEM		HITS		COMPRS	COMPRS			PWR GEN	HYDRL	LITE ALL
R46CB1	VLV VNT/PRESS FL TK	454S3 3	3	4.5 Y							
R46CD1	VALVE PRESS REL NEG	454S3 3	3	1.9 Y							
R46CH1	PUMP AIR EJECTOR	454S3 3	3	7 Y							
R46CN1	RESERVOIR HALON	452S5 2	2	0.5 Y							
R46CN2	RESERVOIR HALON	452X4 2	72	1.1 Y							
R46CP1	VLVE SOL INRT SYS A	452X5 2	3	1.5 Y							
R46C01	PRESSURE EXPL SUPPR	452X4 2	2	1.5 Y							
R46DA1	TANK WING	452X4 1	12	1.5 Y							
R46DA2	TANK WING	454S3 3	4	1.5 Y							
R46EA1	PANEL FUEL CONTROL	452X2 2	2	0.7				Y			
R46EA2	PANEL FUEL CONTROL	452X5 1	3	0.5				Y			
R46EC1	TRANSMITTER FUEL FL	452X2 3	3	2				Y			
R46EC2	TRANSMITTER FUEL FL	454S3 2	11	1.8				Y			
R46ED1	INDICATOR FUEL FLOW	452X2 2	14	2.8				Y			
R46ED2	INDICATOR FUEL FLOW	452X4 2	1	1				Y			
R46EE1	CONTROL UNIT FUEL L	452X2 2	8	2				Y			
R46EG1	CONTROL UNIT FUEL Q	452X2 2	10	1.6				Y			
R46EG2	CONTROL UNIT FUEL Q	452X4 3	4	2.3				Y			
R46EH1		452X2 2	4	1				Y			
R46EK1		452X2 2	4	1.8				Y			
R46EL1	XMTR FL QTY F1 TK F	454S3 3	15	2.9				Y			
R46EM1	TNK UN FL QT WNG IB	452X2 3	2	3				Y			
R46EM2	TNK UN FL QT WNG IB	452X4 2	1	2.1				Y			
R46EV1	LIGHT AERIAL RF IND	452X5 2	4	2.3				Y			
R46E01	FUEL INDICATING-CON	452X5 2	4	1.7				Y			
R46FA1	TANK 370 GALLON EXT	452X4 2	7	1.5 Y							
R46FB1	PYLON 370 GAL TANK	454S3 2	2	1.5 Y							
R46FC1	DISC EXT TK FL WING	452X4 2	3	1.5 Y							
R46FC2	DISC EXT TK FL WING	454S3 2	9	2.5 Y							
R46FD1	TK 370 GAL EXT PYLN	452X4 2	1	0.5 Y							
R46FE1	TANK FUEL 300 GAL	452X4 3	3	2 Y							
R46F01	FUEL TANKS EXTERNAL	452X4 3	8	4.3 Y							

F-16C BLK 40/42 LCOM TASKS
AGE USAGE WORKSHEET

LCOM	TASK DESCRIPTION OR	AFSC	#	500	AVG.	TIME	MC-1A	COMPRS	MC-2A	COMPRS	N2 CART	AIR CON	PWR GEN	AM32A-10	MJ-2A	NF-2D
TASK	SYSTEM/SUBSYSTEM	454S3	3	3	10	2	Y									
R46F02	FUEL TANKS EXTERNAL	452X4	3	3	10	2	Y									
R46F91	NOC	452X4	2	3	1	Y										
R46GA1		452S5	1	4	3.1											
R47AA1	CONVERTER LOX 5 LIT	452X5	1	4	3.1											
R47AA1	CONVERTER LOX 5 LIT	452X4	2	80	1											
R47AA2	CONVERTER LOX 5 LIT	452X5	2	16	1.6											
R47AA3	CONVERTER LOX 5 LIT	452X2	2	3	1											
R47AB1	SW OXY LO PRES WRNG	452X2	1	3	2											
R47AB2	SW OXY LO PRES WRNG	452X4	1	3	2											
R47AB2	SW OXY LO PRES WRNG	452X4	1	9	0.9											
R47AB3	SW OXY LO PRES WRNG	452X5	2	3	2											
R47AB4	SW OXY LO PRES WRNG	452X2	2	10	1.4											
R47AD1	REGULATOR OXY BRTHNG	452X5	2	1	2.5											
R47AD2	REGULATOR OXY BRTHNG	452X2	2	6	0.7											
R47A91	NOC	452X4	1	9	0.6											
R47A92	NOC	452X5	2	22	1.1											
R47A93	NOC	452X4	2	4	0.5											
R47CN1		452X5	2	3	2											
R49AA1	CNTRL ALRM BL LN BR	452X5	2	3	3.2											
R49A91	NOC	452X5	1	2	1											
R49C91		452X2	2	10	1											
R51AA1	INDICATOR AIRSP MCH	452X2	2	15	3.4											
R51AB1	ALTIMETER SERVOED	452X2	3	8	2.5											
R51AC1	IND ANG OF ATTACK	452X2	2	7	1.3											
R51AD1	IND VERT VELOCITY	452X2	2	1	1											
R51AF1		452X2	2	35	1.2											
R51BA1	IND HORIZ SITUATION	452X2	2	16	1											
R51BB1	IND ATTITUDE DIRECT	452X2	2	5	5											
R51BC1	TRANSMTR RATE GYRO	452X4	1	2	0.5											
R51BC2	TRANSMTR RATE GYRO	452X2	2	3	1											
R51B01	ARTIFICIAL REF INSTR	452X4	1	9	1											
R51CB2	CLOCK PILOTS															

F-16C BLK 40/42 LCOM TASKS
AGE USAGE WORKSHEET

LCOM	TASK DESCRIPTION OR	AFSC	#	500	PERCENTAGE AGE USAGE FOR LCOM TASK								NF-2D		
TASK	SYSTEM/SUBSYSTEM	452X2	HITS	AVG. TIME	MC-1A	MC-2A	N2 CART	AIR CON	AM32C-10	AM32A-10	MJ-2A	LITE	ALL		
R51CC1	LIGHT INDEXER AOA	452X2	2	29	2.2				Y						
R51DA1	IND STANDBY ATTITUD	452X2	3	2	3.6				Y						
R51D91	NOC	452X4	3	4	0.5				Y						
R51FA1	COMPUTER CADC	452X2	2	19	2.2				Y						
R51F91	NOC	452X2	2	3	3				Y						
R55AC1	AXIAL ACCELEROMETER	452X2	2	5	1										
R55AD1	TRANSMITTER SURFACE	452X4	2	5	0.5										
R55BD1		452X2	3	1	1.8										
R55DA1	CRASH SRVLBL MMRY	452X2	2	4	1										
R55DB1	SIGNAL ACQUISTN UN	452X2	3	8	1.8										
R55D01	CRASH SURVIVBL FDRS	452X2	2	8	2.3										
R62CB1	ANT VHF VERT STAB	452X2	2	1	0.7				Y						
R62CD1	RCVR/XMTR VHF RM MT	452X2	2	19	1.2				Y						
R62C91	NOC	452X2	3	1	1				Y						
R63BD1	SELECTOR ANTENNA	452X2	2	3	1				Y						
R63BE1	ANT DUAL BAND UPPER	452X2	2	5	1.4				Y						
R63BF1	ANT DUAL BAND LOWER	452X2	2	6	1				Y						
R63BL1	R/T1505 AFT TO 1460	452X2	2	139	1.2				Y						
R63B02	COMM SET UHF	452X4	1	3	0.5				Y						
R63B91	NOC	452X2	2	5	3.5				Y						
R63B92	NOC	452X4	2	4	2.5				Y						
R63CA1	PNL SEC VOICE CNTRL	452X2	2	1	1				Y						
R63CB1	PRCS/ADPTR SEC VOIC	452X2	2	34	1.7				Y						
R63CE1	RELAY RE-978/ARC	452X2	2	8	1.2				Y						
R63C91	NOC	452X2	3	1	1.5				Y						
R64AA1	INTERCOM AMPLIFIER	452X2	2	2	1				Y						
R64AC1	GROUND INTERCM STA	452X2	2	3	2				Y						
R64AD1	GEN.T/C ENG WARNING	452X2	2	3	2				Y						
R64AL1	MESSAGE UNIT VOICE	452X2	2	5	1.3				Y						
R64A01	INTERCOM SET	452X2	2	1	1				Y						
R65AA1	RECEIVER TRANSMITTE	452X2	2	25	1.4			Y	Y						
R65AD1	TRANSPONDER COMPUTR	452X2	2	5	1.2			Y	Y						

F-16C BLK 40/42 LCOM TASKS
AGE USAGE WORKSHEET

LCOM	TASK DESCRIPTION OR	500	PERCENTAGE AGE USAGE FOR LCOM TASK				AGE USAGE FOR LCOM TASK			
TASK	TASK DESCRIPTION OR	DAY	AVG.	MC-1A	MC-2A	AM32C-10	AIR CON	PWR GEN	MJ-2A	NF-2D
NAME	SYSTEM/SUBSYSTEM	HITS	TIME	COMPRS	COMPRS	N2 CART			HYDRL	LITE ALL
R65A01	AIR/GROUND IFF SET	2	1				Y	Y		
R65A91	NOC	2	1				Y	Y		
R69AA1	PANEL ASSY AUDIO 1	2	3					Y		
R69AA2	PANEL ASSY AUDIO 1	3	0.5					Y		
R69AC1	PANEL AUXILLRY COMM	18	1.1					Y		
R69CA1		4	0.5					Y		
R71AA1	RCVR XMITTER TACAN	18	1				Y	Y		
R71AB1	MX9577A OR AARN118V	1	2				Y	Y		
R71A01	TACAN NAVIGATION SET	4	0.9				Y	Y		
R71BA1	RECEIVER ILS	3	2				Y	Y		
R71CE1	MOUNT TWTA	2	1				Y	Y		
R71C01	A VHCL NAV SBSYS	4	0.5				Y	Y		
R71DA1	RCVR/PROCESSOR GPS	48	1.5				Y	Y		
R71DD1	ANTENNA ELECT UNIT	11	3.3				Y	Y		
R71DF1		5	1.5				Y	Y		
R71D01	GLOBAL POSNG SYS	6	1.5				Y	Y		
R74AG1		1	1				Y	Y		
R74AM1	RADAR ANTENNA	45	1.7				Y	Y		
R74AN1	MODULAR LPRF	39	1.4				Y	Y		
R74AP1	XMITTER DUAL MODE	101	1.5				Y	Y		
R74AQ1	PROG SIGNAL PROCSSR	142	1.2				Y	Y		
R74AU1	WAVEGUIDE ASSY	6	2				Y	Y		
R74A01	FIRE CONT RADAR SET	1	1.2				Y	Y		
R74A91	NOC	5	1				Y	Y		
R74BC1		3	1				Y	Y		
R74BJ1	MT AERIAL RFUEL IND	4	1				Y	Y		
R74BK1	HUD PLT'S DSPL LTRN	2	0.8				Y	Y		
R74BP1	HUD CONTROL PANEL	1	1				Y	Y		
R74BT1	PDU DEFRACTIVE HUD	89	1.6				Y	Y		
R74BU1	ELCTRN UN DIFF HUD	40	1.3				Y	Y		
R74BV1	GLARESHIELD	1	0.5				Y	Y		
R74B01	HEAD UP DISPLAY SET	1	1				Y	Y		

F-16C BLK 40/42 LCOM TASKS
AGE USAGE WORKSHEET

LCOM				500	PERCENTAGE AGE USAGE FOR LCOM TASK							
TASK	TASK DESCRIPTION OR SYSTEM/SUBSYSTEM	AFSC	DAY	AVG. TIME	MC-1A COMPRS	MC-2A COMPRS	N2 CART	AIR CON	AM32C-10 PWR GEN	MJ-2A HYDRL	NF-2D LITE ALL	
R74CE1	GEN AVIONICS COMPTR	452X2	2	73	1.5			Y	Y			
R74CF1	BAT GEN AVNCS COMP	452X2	2	2	1.5			Y	Y			
R74DF1	INERTIAL NAVIGTN UN	452X2	2	69	1.5			Y	Y			
R74DG1	BATTERY INU	452S5	1	3	10.5			Y	Y			
R74DG1	BATTERY INU	452X2	1	3	10.5			Y	Y			
R74DG1	BATTERY INU	458S0	1	3	10.5			Y	Y			
R74DG2	BATTERY INU	452X2	2	23	1			Y	Y			
R74D01	INERTIAL NAVIG SET	452X2	2	2	1.5			Y	Y			
R74EE1		452X2	2	1	1.5			Y	Y			
R74GA1	SENSOR CVTS CKPT TV	455S0	3	3	2.3			Y	Y			
R74GB1	RECORDER A-B VD TP	455S0	2	77	0.7			Y	Y			
R74GC1	PANEL AVTR CONTROL	455S0	2	4	1			Y	Y			
R74GD1		452X2	2	3	1			Y	Y			
R74HA1	DATA TRANSFER UNIT	452X2	2	10	1.2			Y	Y			
R74JA1	DATA ENTRY DISPLAY	452X2	2	11	2.2			Y	Y			
R74JB1	POWER SUPPLU DED	452X2	3	8	1.7			Y	Y			
R74JE1	BATTERY DEEU	452X2	2	12	0.8			Y	Y			
R74JF1	INTEGRATED KEYBOARD	452X2	2	2	1.5			Y	Y			
R74JG1	DEEU FAN	452X2	2	3	1			Y	Y			
R74JL1	EXP DAT ENT ELCT UN	452X2	2	23	2.7			Y	Y			
R74JM1	DSPLY PILOT FALT LS	452X2	2	2	0.5			Y	Y			
R74J01	DATA ENTRY CP INTFC	452X2	2	1	1.3			Y	Y			
R74KA1	MULTIFUNCTN DISPLAY	452X2	2	31	1.5			Y	Y			
R74KB1	PRGMMBL DSPLY GNRTR	452X2	2	50	1.2			Y	Y			
R74LA1	RCVR/XMTR RDR ALT	452X2	2	31	1.4			Y	Y			
R74LC1	ANT RADAR ALT FWD	452X2	1	1	0.5			Y	Y			
R74LE1	CONVERTER SGNL DATA	452X2	2	13	1.4			Y	Y			
R74PA1	ANTENNA GIMBAL ASSY	452X2	2	5	1.5			Y	Y			
R74PB1	TRANSMITTER ASSY	452X2	2	13	1			Y	Y			
R74PC1	RCVR EXCITER ASSY	452X2	2	8	1.6			Y	Y			
R74PD1	INTFC UNIT RADAR	452X2	2	8	1.6			Y	Y			
R74PE1	TF PWR SUPPLY ASSY	452X2	2	17	1.7			Y	Y			

F-16C BLK 40/42 LCOM TASKS
AGE USAGE WORKSHEET

LCOM						500		PERCENTAGE AGE USAGE FOR LCOM TASK							
TASK	TASK DESCRIPTION OR SYSTEM/SUBSYSTEM	AFSC	#	DAY	AVG. TIME	MC-1A COMPRS	MC-2A COMPRS	N2 CART	AIR CON	AM32C-10	AM32A-10	MJ-2A	NF-2D		
R74PF1	WAVEGUID PRESS UNIT	452X2	2	3	2				Y		Y		LITE ALL		
R74PG1	POD CONTROL COMPTR	452X2	2	3	1.3				Y		Y				
R74PH1	ENVRN CNTL UNIT	452X2	2	12	1				Y		Y				
R74PK1	POWER SUPPLY	452X2	2	13	1.6				Y		Y				
R74PL1	FWD SECTION	452X2	2	12	1.2				Y		Y				
R74P01	NAVIGATIONAL SET	452X2	2	28	1.4				Y		Y				
R74P91	NOC	452X2	2	1	1				Y		Y				
R74SP1		452X2	2	6	1				Y		Y				
R74ZA1	MUX BUS #1 FWD AVNC	452X2	2	3	2				Y		Y				
R74ZB1	MUX BUS #2 FWD AVNC	452X2	2	5	2.7				Y		Y				
R74ZC1	MUX BUS AFT AVIONIC	452X2	2	6	3				Y		Y				
R74ZD1	MATRIX BVR FWD D MUX	452X2	2	2	2				Y		Y				
R74ZE1	MTRX BVR IADM&AM #1	452X2	3	2	2.5				Y		Y				
R74ZJ1	MATRIX L/H FWD AVI	452X2	2	3	1				Y		Y				
R74Z01	MUX BUSES	452X2	3	3	3				Y		Y				
R74Z91	NOC	452X2	3	3	10				Y		Y				
R75AA1	GUN ASSEMBLY 20MM	462X0	3	2	3				Y		Y				
R75AN1		452X2	2	5	1				Y		Y				
R75A01	GUN SYSTEM	462X0	3	7	7.8				Y		Y				
R75BA1	PYLON WING WEAPONS	462S0	2	1	1				Y		Y				
R75BA1	PYLON WING WEAPONS	462X0	1	1	1				Y		Y				
R75BA2	PYLON WING WEAPONS	462X0	3	17	1.3				Y		Y				
R75BB1	PYLON CENTERLINE	462X0	3	14	1.1				Y		Y				
R75BD1	ADPTR MSSLE LAUNCHR	462X0	3	4	2				Y		Y				
R75CB1	LAUNCHER WING TIP	462X0	3	38	1				Y		Y				
R75CJ1	DISP BOMB SUU-20B/A	462X0	3	37	0.7				Y		Y				
R75CK1	RACK EJECT TER-9/A	458S0	2	5	2				Y		Y				
R75CK1	RACK EJECT TER-9/A	462X0	1	5	2				Y		Y				
R75CK2	RACK EJECT TER-9/A	462X0	3	37	1.3				Y		Y				
R75CL1	LAUNCHR MSL LAU-117	462X0	3	9	1				Y		Y				
R75CN1	LNCR MSL WT LAU-129	462X0	3	1	1.5				Y		Y				
R75CP1	LNCR MSL UW LAU-129	462X0	3	39	1.3				Y		Y				

F-16C BLK 40/42 LCOM TASKS
AGE USAGE WORKSHEET

LCOM TASK	TASK DESCRIPTION OR SYSTEM/SUBSYSTEM	AFSC	#	DAY	500 HITS	PERCENTAGE AGE USAGE FOR LCOM TASK				AM32C-10 PWR GEN	AM32A-10 HYDRL	MJ-2A	NF-2D LITE ALL
						AVG. TIME	MC-1A COMPRS	MC-2A COMPRS	N2 CART				
R75C01	WEAPON RACK SYSTEM	462X0	3	15	1.2					Y			
R75DD1	RMTE INT JET-RL SMS	462X0	3	13	2.4					Y			
R75DF1	REMOTE INF UN NCLR	462X0	3	6	1					Y			
R75DQ1	INTFC UNIT ENH CTRL	462X0	3	48	1.4					Y			
R75EJ1	MAT WNG STR 2 RH WG	462X0	3	4	5					Y			
R75EL1	MTX WG STR 1&9 A908	462X0	3	3	1.8					Y			
R75EM1	MTX WG STR 2&8 A908	462X0	3	2	2					Y			
R75E91	NOC	452X2	2	3	2					Y			
R75Z01		452X2	2	2	5					Y			
R76AB1		452X2	2	2	1					Y			
R76BA1	INTERFACE BLANKER	452X2	2	1	0.7					Y			
R76BC1	BLNKR UNT ADV INTFC	452X2	2	31	1.6					Y			
R76BC2	BLNKR UNT ADV INTFC	452X4	1	2	1					Y			
R76BL1		452X2	2	4	1					Y			
R76CA1	CONTROL INDICATOR	452X2	3	2	1.5					Y			
R76CC1	ADAPTER ASSY ECM PO	452X2	3	2	2.5					Y			
R76CE1	POD ALQ-131	452X2	2	51	1.2					Y			
R76CE2	POD ALQ-131	452X2	2	2	19.4					Y			
R76CE2	POD ALQ-131	456S1	1	2	19.4					Y			
R76C01	ECM POD SET	452X2	2	10	1.2					Y			
R76DC1	SEQUENCE SWITCH	452X2	2	14	1.7					Y			
R76DD1	DISPNSR CHAFF-FLARE	452X2	3	10	1.5					Y			
R76DE1	EMI FILTER	452X2	2	1	4					Y			
R76EB1	CONTROL PNL AUX IND	452X2	2	10	1.5					Y			
R76EB2	CONTROL PNL AUX IND	452X4	1	2	1.5					Y			
R76EC1	AZIMUTH INDICATOR	452X2	2	8	1.3					Y			
R76ED1	FSRS RECEIVER	452X2	2	9	1.4					Y			
R76EE1	RECEIVER CONTR FSRs	452X2	2	13	1.6					Y			
R76EG1	SIGNAL PROCESSOR	452X2	2	37	1.5					Y			
R76EH1	TRANS LINE COUPLER	452X2	2	14	1.4					Y			
R76EK1	AMPLIFIER DET C-D	452X2	2	16	1.2					Y			
R76EL1	AMP DETECTR E-J FWD	452X2	2	1	1.5					Y			

F-16C BLK 40/42 LCOM TASKS
AGE USAGE WORKSHEET

LCOM					500	PERCENTAGE AGE USAGE FOR LCOM TASK									
TASK	TASK DESCRIPTION OR			DAY	AVG.	MC-1A	MC-2A	N2 CART	AIR CON	AM32C-10	AM32A-10	MJ-2A	NF-2D		
NAME	SYSTEM/SUBSYSTEM	AFSC	#	HITS	TIME	COMPRS	COMPRS				PWR GEN	HYDRL	LITE ALL		
R76EM1	AMP DETECTR E-J AFT	452X2	2	11	2.3				Y		Y				
R76ET1	RADOME FWD LH	452X2	2	1	1				Y		Y				
R76EW1	ANT ASSY C/D BAND	452X2	2	5	1.5				Y		Y				
R76EX1	ANTENNA LEF	452X2	2	3	1				Y		Y				
R76W01		452X2	2	61	1.3				Y		Y				
R76W02		452X2	1	2	1.3				Y		Y				
R76W02		456S1	1	2	1.3				Y		Y				
R97AF1	DET TRNS 51126-1	454S2	2	5	1								Y		
R97AS1	DETNTN TRNSFR ASSY	454S2	2	3	1								Y		
R97AT1	DETNTN TRNSFR ASSY	454S2	2	2	3								Y		
R97AW1	DET TRNS 16K0341-25	454S2	2	3	3								Y		
R97C01	CANOPY JETT SYSTEM	452X4	2	1	1								Y		
R97EA1	RKT MTR SEAT STABN	454S2	2	3	2.5								Y		
T11001	AIRFRAME	452X4	3	2	2	Y									
T12A01	COCKP SUPP STRUCT	452X4	3	2	8										
T12C91	NOC	462X0	3	1	1										
T13A01	LANDING GR CONT SYS	452X2	3	3	4						Y				
T13F01	NOSE WHL STEER SYS	452X2	2	1	1.5										
T13F02	NOSE WHL STEER SYS	452X5	2	2	0.7										
T13L01	BRAKE/SKID CONTROL	452X4	2	8	2				Y		Y				
T13L02	BRAKE/SKID CONTROL	452X5	3	6	14.8				Y		Y				
T13001	LANDING GEAR SYSTEM	452X2	3	1	6.5										
T13002	LANDING GEAR SYSTEM	452X4	3	1	7.8										
T14AB1	CONTROLLER STICK	452X2	2	1	1				Y		Y				
T14AE1	PANEL MANUAL TRIM	452X2	2	6	0.8				Y		Y				
T14AL1	RECORDER FLCs DATA	452X2	2	3	2				Y		Y				
T14AP1	CMPTD DIG FLGT CNTR	452X2	2	5	1.3				Y		Y				
T14A01	PRIM FLT CONT ELECT	452X2	2	5	2				Y		Y				
T14DG1	SEAL UPPER L/H 5433	452X4	1	1	1				Y		Y				
T14FE1	MONITOR PROBE HEATR	452X2	3	1	2.5				Y		Y				
T14FG1	TUBE PITOT STATIC	452X2	3	5	3.5				Y		Y				
T14001	FLIGHT CONTROL SYS	452X2	2	21	5.8				Y		Y				

F-16C BLK 40/42 LCOM TASKS
AGE USAGE WORKSHEET

LCOM TASK	TASK DESCRIPTION OR NAME	AFSC	#	DAY	500			PERCENTAGE AGE USAGE FOR LCOM TASK				NF-2D LITE ALL
					AVG.	TIME	MC-1A COMPRS	MC-2A COMPRS	N2 CART	AM32C-10 AIR CON	AM32A-10 PWR GEN HYDRL	
T24AB1	GAS GEN EMER PWR UN	452X4	3	2	4.8							
T24BA1	TANK ASSY HYDRAZINE	454S3	2	2	3							
T27G01	ENGINE SYSTEMS	452X4	3	3	3.7							
T27Z01	TURBOFAN ENGINE LRU	452X4	2	3	1.5							
T27001	TURBOFAN POWR PLANT	452X4	2	8	2.8							
T271A1	ENGINE INSTRUMENTS	452X2	2	4	1							
T271J1	ENGINE WARNING SYS	452X2	2	1	1					Y		
T41A01	AIRCOND SUBSYSTEM	452X2	2	1	1					Y		
T41A02	AIRCOND SUBSYSTEM	452X4	2	2	3					Y		
T41001	ENVIR CONT SYSTEM	452X5	1	2	2				Y	Y		
T44A01	EXTERIOR LIGHT SYS	452X2	2	2	2					Y		
T44BA1	PANEL INT LIGHT CNT	452X4	2	4	1					Y		
T44CA1	LIGHT MASTR CAUTION	452X4	2	4	0.5					Y		
T44C91	NOC	452X2	1	1	1					Y		
T46A01	ENGINE SUPPLY	454S3	3	1	7							
T46B01	REFUEL & DEFUEL SYS	454S3	2	2	1				Y			
T46CB1	VLV VNT/PRESS FL TK	454S3	3	2	1.2	Y						
T46CN1	RESERVOIR HALON	452X4	2	2	1	Y						
T46C01	PRESSURE EXPL SUPPR	452X4	2	2	6	Y						
T46C02	PRESSURE EXPL SUPPR	454S3	2	1	1.5	Y				Y		
T46D01	FUEL TANKS INTERNAL	454S3	3	3	3							
T46FA1	TANK 370 GALLON EXT	454S3	2	1	3	Y				Y		
T46001	FUEL SYSTEM	454S3	3	14	4.9					Y		
T51AA1	INDICATOR AIRSP MCH	452X2	2	2	1.5					Y		
T51AB1	ALTIMETER SERVOED	452X2	2	4	1					Y		
T51B01	ARTIFICAL REF INSTR	452X2	1	3	1					Y		
T51F01	AIR DATA SYSTEM	452X2	2	6	1.5					Y		
T51001	FLIGHT INSTRUMENTS	452X2	2	2	1.5					Y		
T55DB1	SIGNAL ACQUISTN UN	452X2	3	2	1.5							
T55D01	CRASH SURVIVBL FDRS	452X2	2	3	1							
T63A01		452X2	2	4	1					Y		
T63BL1	R/T1505 AFT TO 1460	452X2	2	5	1.4					Y		

F-16C BLK 40/42 LCOM TASKS
AGE USAGE WORKSHEET

LCOM						500		PERCENTAGE AGE USAGE FOR LCOM TASK							
TASK	TASK DESCRIPTION OR SYSTEM/SUBSYSTEM	AFSC	#	DAY	AVG. TIME	MC-1A COMPRS	MC-2A COMPRS	N2 CART	AIR CON	AM32C-10	AM32A-10	MJ-2A	NF-2D		
NAME				HITS						PWR GEN	HYDRL	LITE ALL			
T63B01	COMM SET UHF	452X2	2	8	0.6					Y					
T63C01	SYS SEC VOICE COMM	452X2	2	2	3.8					Y					
T63001	UHF COMMUNICATIONS	452X2	2	2	1.1					Y					
T64001	INTERPHONE SYSTEM	452X2	2	2	0.3					Y					
T65A01	AIR/GROUND IFF SET	452X2	3	2	2				Y	Y					
T69AC1	PANEL AUXILLRY COMM	452X2	2	2	0.5					Y					
T71DA1	RCVR/PROCESSOR GPS	452X2	2	3	1.1				Y	Y					
T71D01	GLOBAL POSNG SYS	452X2	2	15	1.1				Y	Y					
T71001	RADIO NAVIGATION	452X2	1	2	1				Y	Y					
T74AN1	MODULAR LPRF	452X2	1	9	1				Y	Y					
T74AP1	XMITTER DUAL MODE	452X2	2	2	1				Y	Y					
T74AQ1	PROG SIGNAL PROCSSR	452X2	2	2	1				Y	Y					
T74A01	FIRE CONT RADAR SET	452X2	2	12	1.3				Y	Y					
T74BT1	PDU DEFRACTIVE HUD	452X2	1	2	1				Y	Y					
T74B01	HEAD UP DISPLAY SET	452X2	1	2	1				Y	Y					
T74CE1	GEN AVIONICS COMPTR	452X2	2	4	1.3				Y	Y					
T74DA1	INERTIAL NAVIG UNIT	452X2	2	2	1				Y	Y					
T74DF1	INERTIAL NAVIGTN UN	452X2	2	2	1.5				Y	Y					
T74DG1	BATTERY INU	452X2	2	1	1				Y	Y					
T74D01	INERTIAL NAVIG SET	452X2	2	3	1.5				Y	Y					
T74GB1	RECORDER A-B VD TP	455S0	2	5	0.4				Y	Y					
T74GD1		455S0	2	3	1				Y	Y					
T74G01	AIRBORN VIDEO SYS	455S0	2	2	7				Y	Y					
T74H91	NOC	452X2	2	1	2				Y	Y					
T74JE1	BATTERY DEEU	452X2	2	8	1.3				Y	Y					
T74J01	DATA ENTRY CP INTFC	452X2	3	4	1				Y	Y					
T74KA1	MULTIFUNCTN DISPLAY	452X2	2	4	1.1				Y	Y					
T74K01	MULTIFCTN DSPLY SET	452X2	3	3	1.3				Y	Y					
T74LA1	RCVR/XMTR RDR ALT	452X2	2	4	0.9				Y	Y					
T74L01	RADAR ALTIMETER	452X2	2	5	1.7				Y	Y					
T74N01	LNTN TGT AN/AAQ-14	452X2	2	2	3				Y	Y					
T74P01	NAVIGATIONAL SET	452X2	2	1	4.5				Y	Y					

F-16C BLK 40/42 LCOM TASKS
AGE USAGE WORKSHEET

LCOM TASK	TASK DESCRIPTION OR SYSTEM/SUBSYSTEM	AFSC	#	500			PERCENTAGE AGE USAGE FOR LCOM TASK						NF-2D
				DAY	AVG. TIME	MC-1A	MC-2A	N2 CART	AIR CON	AM32C-10	AM32A-10	MJ-2A	
T74Z01	MUX BUSES	452X2	3	1	8				Y				
T75A01	GUN SYSTEM	462X0	1	1	0.5				Y				
T75A91	NOC	462X0	3	3	8				Y				
T75BA1	PYLON WING WEAPONS	462X0	3	2	2.3				Y				
T75CB1	LAUNCHER WING TIP	462X0	3	2	4.5				Y				
T75CJ1	DISP BOMB SUU-20B/A	462X0	3	4	1				Y				
T75CL1	LAUNCHR MSL LAU-117	462X0	3	3	2.3				Y				
T75C01	WEAPON RACK SYSTEM	462X0	2	2	1.5				Y				
T75DQ1	INTFC UNIT ENH CTRL	462X0	1	4	0.1				Y				
T75001	WEAPONS DELIVERY	452X2	3	2	2				Y				
T75002	WEAPONS DELIVERY	462S0	1	1	5.9				Y				
T75003	WEAPONS DELIVERY	462X0	3	2	0.8				Y				
T76BC1	BLNKR UNT ADV INTFC	452X2	2	6	1.9				Y				
T76B01	INTRFRNCE BLNKR SET	452X2	2	10	1.1				Y				
T76C01	ECM POD SET	452X2	2	4	1				Y				
T76DC1	SEQUENCE SWITCH	452X2	1	3	1				Y				
T76DD1	DISPNSR CHAFF-FLARE	452X2	3	3	1				Y				
T76DJ1	DSPNSR CHAFF-FLR -38	452X2	2	4	1				Y				
T76D01	CHAFF-FLARE DISP ST	452X2	2	7	1.4				Y				
T76EG1	SIGNAL PROCESSER	452X2	2	1	0.5				Y				
T76E01	RAD THREAT WARN SET	452X2	2	14	1.8				Y				
V11A01	NOSE SECTION	452X4	1	1	0.2	Y							
V11CB1	DR LWR STRK LH 2101	452X4	3	2	6								
V11C01	FWD FUSELAGE SEC	452X5	2	2	1	Y							
V11C91	NOC	452X4	2	4	0.5								
V11GD1	COV ENG ACC LH 4301	452X4	3	4	0.8								
V11JB1	FAIR FWD LH LO 4431	452X4	3	2	4								
V11001	AIRFRAME	452X4	2	5	1.4	Y							
V11091		452X4	3	1	2.8	Y							
V12A01	COCKP SUPP STRUCT	452X2	1	3	0.1								
V12CA1	CANOPY ASSY	454S2	2	2	3.6								
V12CC1	ACTUATOR ASSEMBLY	454S2	2	3	0.6								

F-16C BLK 40/42 LCOM TASKS
AGE USAGE WORKSHEET

LCOM	TASK DESCRIPTION OR	AFSC	#	500	AVG.	PERCENTAGE AGE USAGE FOR LCOM TASK							
TASK	SYSTEM/SUBSYSTEM			DAY	TIME	MC-1A	MC-2A	N2 CART	AIR CON	AM32C-10	AM32A-10	MJ-2A	NF-2D
NAME				HITS		COMPRS	COMPRS			PWR GEN	HYDRL		LITE ALL
V12EA1	REEL ASSY PWR INERT	454S2	2	2	1								
V12EB1	STRUCTURE ASSY SEAT	454S2	2	2	0.5								
V12EH1	DROGUE SYSTEM	454S2	2	1	1								
V12E01	EJECTN SEAT ACES II	454S2	2	13	2.5								
V12091		452X4	2	1	1								
V13AA1	VALVE MLG SELECTOR	452X4	3	1	4						Y		
V13A91	NOC	452X2	2	1	1						Y		
V13F01	NOSE WHL STEER SYS	452X4	2	1	4								
V13F02	NOSE WHL STEER SYS	452X5	1	4	0.2								
V13HA1	AXLE MLG L/H	452X4	2	1	1.3				Y	Y	Y	Y	Y
V13JA1	STRUT SHOCK NLG	452X4	1	4	0.7						Y	Y	
V13LA1	VALVE MLG BRAKE CTL	452X4	3	5	0.8				Y	Y	Y		
V14AB1	CONTROLLER STICK	462X0	2	2	0.5				Y	Y			
V14AP1	CMPTD DIG FLGT CNTR	452X2	3	3	0.9				Y	Y			
V14A01	PRIM FLT CONT ELECT	452X2	3	7	0.7				Y	Y			
V14CB1	HORIZ STABILIZER	458S1	2	4	1				Y	Y			
V14C91	NOC	452X4	1	2	1				Y	Y			
V14D01	LEADING EDGE FLAPS	452X4	1	1	2				Y	Y			
V14F01	AIR DATA	452X2	3	7	0.7				Y	Y			
V14F02	AIR DATA	452X2	1	2	1.5				Y	Y			
V14F02	AIR DATA	452X4	1	2	1.5				Y	Y			
V14001	FLIGHT CONTROL SYS	452X2	2	11	1.4				Y	Y			
V14002	FLIGHT CONTROL SYS	452X4	3	4	3.1				Y	Y			
V24AA1	PWR UN TURBINE EPU	452X5	2	2	0.3								
V24AB1	GAS GEN EMER PWR UN	452X4	2	1	1.5								
V24DA1	STARTER JET FUEL	452X4	1	2	0.3			Y	Y	Y			
V24EB1	SHAFT POWER TAKEOFF	452X4	1	1	3								
V27EC1	EXHAUST NOZZLE ASSY	452X4	2	5	3								
V27EC2	EXHAUST NOZZLE ASSY	454S0	1	2	1								
V27GJ1	LUBRICATION SYSTEM	452X4	3	5	2.3								
V27GP2	ELECTRICAL SYSTEM	452X4	2	3	2								
V27GT1	AIR/ANTI-ICE SYSTEM	452X4	3	7	0.8					Y			

F-16C BLK 40/42 LCOM TASKS
AGE USAGE WORKSHEET

LCOM	TASK DESCRIPTION OR	AFSC	#	DAY	500	AVG.	TIME	MC-1A	COMPRS	MC-2A	COMPRS	N2 CART	AIR CON	AM32C-10	AM32A-10	MJ-2A	NF-2D
TASK	SYSTEM/SUBSYSTEM			HITS										PWR GEN	HYDR	LITE	ALL
V27G01	ENGINE SYSTEMS	452X4	3	2	5												
V27Z01	TURBOFAN ENGINE LRU	452X4	2	2	0.1												
V27Z02	TURBOFAN ENGINE LRU	454S0	2	3	3.5												
V27Z02	TURBOFAN ENGINE LRU	458S1	2	3	3.5												
V27Z03	TURBOFAN ENGINE LRU	454T0	1	2	1												
V27Z04	TURBOFAN ENGINE LRU	454T0	1	2	6.5												
V27Z04	TURBOFAN ENGINE LRU	458S1	1	2	6.5												
V27Z05	TURBOFAN ENGINE LRU	458S1	1	6	1.7												
V27Z91	NOC	452X4	1	2	0.1												
V27001	TURBOFAN POWR PLANT	452X4	3	2	2.3												
V27002	TURBOFAN POWR PLANT	458S1	2	5	1.8												
V27091		452X4	2	10	2.2												
V271A1	ENGINE INSTRUMENTS	452X4	1	4	2												
V41AA1	VLV B/A REG SHTF 13	452X5	2	9	2.5									Y			
V41AB1	TURBINE COOLING	452X4	2	1	0.5									Y			
V41AC1	CONT TEMP CABIN AIR	452X5	2	7	0.5									Y			
V41AD1	VLV RADAR COOL SHTF	452X2	2	2	1									Y			
V41A01	AIRCOND SUBSYSTEM	452X2	2	7	1.7									Y			
V41A02	AIRCOND SUBSYSTEM	452X4	2	2	0.1									Y			
V41A03	AIRCOND SUBSYSTEM	452X5	3	5	0.8									Y			
V41A91	NOC	452X5	2	2	2												
V41B01	PRESSURIZATION	452X5	2	3	2							Y		Y			
V42AA1	CONSTANT SPEED DRIV	452X5	2	1	2												
V42AJ1	GEN 10 KVA/FLCS PMG	452X5	2	1	1												
V42A01	AC GEN DRIVE ASSY	452X2	2	2	1												
V42GA1	BATTERY AIRCRAFT	452S5	2	2	2.1									Y			
V42GA2	BATTERY AIRCRAFT	452S5	1	2	0.6									Y			
V42GA2	BATTERY AIRCRAFT	452X4	1	2	0.6									Y			
V42GA3	BATTERY AIRCRAFT	452S5	1	3	4									Y			
V42GA3	BATTERY AIRCRAFT	452X5	1	3	4									Y			
V42GA4	BATTERY AIRCRAFT	452X4	1	4	0.2									Y			
V42GA5	BATTERY AIRCRAFT	452X5	2	2	1									Y			

F-16C BLK 40/42 LCOM TASKS
AGE USAGE WORKSHEET

LCOM	TASK DESCRIPTION OR	AFSC	#	500	PERCENTAGE AGE USAGE FOR LCOM TASK											
TASK	SYSTEM/SUBSYSTEM			DAY	AVG.	MC-1A	MC-2A	COMPRS	COMPRS	N2 CART	AIR CON	AM32C-10	AM32A-10	MJ-2A	NF-2D	
NAME				HITS	TIME	COMPRS	COMPRS							HYDRL	LITE ALL	
V42GC1	BATTERY A/C IN PRF	452S5	2	6	0.2							Y				
V42001	ELECT POWER SYSTEM	452X4	1	4	0.5						Y		Y			
V44AA1	LIGHT TAXI	452X4	1	2	0.6								Y			
V44A01	EXTERIOR LIGHT SYS	452X4	1	1	0.5								Y			
V44CA1	LIGHT MASTR CAUTION	452X5	2	2	1								Y			
V44001	LIGHTING SYSTEM	452X2	2	1	1.5								Y			
V45AC1	TRANS HYD PRESSURE	452X4	2	2	1.5					Y	Y	Y	Y			
V45AH1	RESERVOIR HYD 800CI	452X4	1	1	0.1					Y	Y	Y	Y			
V45A91	NOC	452X4	2	3	1					Y	Y	Y	Y			
V46AP1	HEAT EXCH FUEL/OIL	454S3	3	2	6.3	Y										
V46A01	ENGINE SUPPLY	454S3	3	4	2.3											
V46B01	REFUEL & DEFUEL SYS	454S3	3	2	4.5											
V46CA1	VLV VNT/PRESS EX TK	454S3	3	3	2	Y										
V46CN1	RESERVOIR HALON	452S5	2	2	4	Y										
V46CN2	RESERVOIR HALON	452X4	1	5	1	Y										
V46DA1	TANK WING	454S3	2	4	0.9	Y										
V46DB1	TANK FWD BLADDER F1	454S3	3	2	7.5					Y	Y	Y				
V46ED1	INDICATOR FUEL FLOW	454S3	2	3	2							Y				
V46E01	FUEL INDICATING-CON	452X2	3	1	4							Y				
V46FA1	TANK 370 GALLON EXT	452X4	3	5	2.5	Y										
V46FB1	PYLON 370 GAL TANK	452X4	2	4	1.5	Y										
V46FD1	TK 370 GAL EXT PYLN	454S3	2	3	4	Y										
V46F01	FUEL TANKS EXTERNAL	452X4	1	2	0.5	Y										
V46F02	FUEL TANKS EXTERNAL	454S3	3	1	6.5	Y										
V46001	FUEL SYSTEM	452X4	3	3	7.5						Y	Y				
V46002	FUEL SYSTEM	454S3	3	16	5.1						Y	Y				
V47AA1	CONVERTER LOX 5 LIT	452S5	2	4	3											
V47AA2	CONVERTER LOX 5 LIT	452X5	2	2	2											
V47AD1	REGULTOR OXY BRTHNG	452X2	1	1	1.5						Y		Y			
V49AB1	EL SENSNG 126 INCH	452X5	2	1	1						Y		Y			
V51AA1	INDICATOR AIRSP MCH	452X2	2	3	0.5								Y			
V51BB1	IND ATTITUDE DIRECT	452X2	1	2	0.5								Y			

F-16C BLK 40/42 LCOM TASKS
AGE USAGE WORKSHEET

LCOM	TASK DESCRIPTION OR	AFSC	#	500	PERCENTAGE AGE USAGE FOR LCOM TASK									
TASK	SYSTEM/SUBSYSTEM	AFSC	#	DAY	AVG.	MC-1A	MC-2A	AM32C-10	AM32A-10	MJ-2A	NF-2D			
NAME				HITS	TIME	COMPRS	COMPRS	N2	CART	AIR CON	PWR GEN	HYDRL	LITE	ALL
V51CC1	LIGHT INDEXER AOA	452X2	3	3	1						Y			
V51FA1	COMPUTER CADC	452X2	3	2	1						Y			
V51001	FLIGHT INSTRUMENTS	452X4	2	3	0.1						Y			
V55DB1	SIGNAL ACQUISTN UN	452X2	3	4	2									
V55D01	CRASH SURVIVBL FDRS	452X2	3	2	4									
V62C01	VHF COMM SET	452X2	2	3	2.5						Y			
V62001	VHF COMMUNICATIONS	452X2	2	1	0.5						Y			
V63BL1	R/T1505 AFT TO 1460	452X2	2	2	0.7						Y			
V63B01	COMM SET UHF	452X2	2	1	2						Y			
V63001	UHF COMMUNICATIONS	452X2	3	3	1.8						Y			
V64AL1	MESSAGE UNIT VOICE	452X2	1	2	0.5						Y			
V65AD1	TRANSPONDER COMPUTR	452X2	2	1	1			Y			Y			
V65A01	AIR/GROUND IFF SET	452X2	2	2	2.3			Y			Y			
V71A01	TACAN NAVIGATION SET	452X2	3	1	2			Y			Y			
V71D01	GLOBAL POSNG SYS	452X2	1	7	1			Y			Y			
V74A01	FIRE CONT RADAR SET	452X2	2	4	1			Y			Y			
V74BK1	HUD PLT'S DSPL LTRN	452X2	1	1	0.6			Y			Y			
V74D01	INERTIAL NAVIG SET	452X2	3	4	0.8			Y			Y			
V74H01	DATA TRANSFER EQUIP	452X2	2	3	1			Y			Y			
V74J01	DATA ENTRY CP INTFC	452X2	2	1	0.5			Y			Y			
V74K01	MULTIFCTN DSPLY SET	452X2	2	1	8			Y			Y			
V74PG1	POD CONTROL COMPTPR	452X4	1	1	1.5			Y			Y			
V74P01	NAVIGATIONAL SET	452X2	2	3	0.5			Y			Y			
V75AA1	GUN ASSEMBLY 20MM	462X0	1	2	0.1			Y			Y			
V75A01	GUN SYSTEM	462X0	3	6	1.4			Y			Y			
V75BA2	PYLON WING WEAPONS	462X0	3	3	2.8			Y			Y			
V75BB1	PYLON CENTERLINE	462X0	3	4	1			Y			Y			
V75CA1	LAUNCHER UNDERWING	462X0	3	9	1.2			Y			Y			
V75CB1	LAUNCHER WING TIP	462X0	3	18	0.9			Y			Y			
V75CJ1	DISP BOMB SUU-20B/A	462X0	3	5	0.8			Y			Y			
V75CK1	RACK EJECT TER-9/A	462X0	3	7	1			Y			Y			
V75CL1	LAUNCHR MSL LAU-117	462X0	3	1	1.9			Y			Y			

F-16C BLK 40/42 LCOM TASKS
AGE USAGE WORKSHEET

LCOM TASK	TASK DESCRIPTION OR SYSTEM/SUBSYSTEM	AFSC	#	500		PERCENTAGE AGE USAGE FOR LCOM TASK				AM32C-10	PWR GEN	AM32A-10	MJ-2A	NF-2D
				DAY	AVG. TIME	MC-1A	COMPRS	MC-2A	COMPRS	N2 CART	AIR CON	Y	HYDRL	LITE ALL
V75CP1	LNCR MSL UW LAU-129	462X0	3	47	1						Y	Y		
V75DD1	RMTE INT JET-RL SMS	462X0	3	1	0.8						Y	Y		
V75DQ1	INTFC UNIT ENH CTRL	462X0	3	2	0.8						Y	Y		
V75D01	STORES MGT SYSTEM	462X0	3	1	0.5						Y	Y		
V75001	WEAPONS DELIVERY	462X0	3	10	0.6						Y	Y		
V76BC1	BLNKR UNT ADV INTFC	452X2	2	4	1.3						Y	Y		
V76CE1	POD ALQ-131	452X2	3	5	1.3						Y	Y		
V76C01	ECM POD SET	452X2	2	9	1						Y	Y		
V76EE1	RECEIVER CONTR FSRs	452X2	2	1	0.5						Y	Y		
V76E01	RAD THREAT WARN SET	452X2	2	12	1.5						Y	Y		
V97AF1	DET TRNS 51126-1	454S2	2	5	0.1									Y
X11AB1	RADOME ASSY NOSE	452X2	3	2	3									
X11AB2	RADOME ASSY NOSE	452X4	3	3	1									
X11AD1	DOOR FWD BAY RH1202	452X4	2	1	2									
X11A91	NOC	452X4	2	1	1.5									
X11BD1		452X4	2	3	2									
X11CB1	DR LWR STRK LH 2101	452X4	2	2	0.7									
X11CD1	COV LWR INLT ST2301	452X4	2	5	0.5									
X11EA1	FRAMES	452X4	2	2	9.5									
X11ED1	DR ECS CMPT LH 3301	452X4	1	2	0.5				Y					
X11EE1	COV AMMO DRUM 3401	452X4	2	3	1.5									
X11E91	NOC	452X4	2	4	0.3									
X11GD1	COV ENG ACC LH 4301	452X4	1	14	1.2									
X11LC1	SL LLE FLP L-IB5303	452X4	2	10	1									
X11LD1	FAIR LWR FLAPRN5305	452X4	2	3	1									
X11LF1	SL UPR LEF L-IB5407	452X4	1	3	0.5				Y					
X11MC1	SL LLE FLP R-IB6304	452X4	2	2	0.8									
X11M91	NOC	452X4	1	11	0.8									
X11091		452X4	2	1	1									
X12AE1	CONSOLE PILOT LH	452X2	2	2	0.5									
X12AE2	CONSOLE PILOT LH	452X4	2	3	0.9									
X12AG1	GUIDE ASSY FOOT LH	452X4	2	3	0.7									

F-16C BLK 40/42 LCOM TASKS
AGE USAGE WORKSHEET

LCOM				500	PERCENTAGE AGE USAGE FOR LCOM TASK							
TASK	TASK DESCRIPTION OR SYSTEM/SUBSYSTEM	AFSC	#	DAY	AVG. TIME	MC-1A COMPRS	MC-2A COMPRS	N2 CART	AIR CON	AM32C-10 AM32A-10 PWR GEN	MJ-2A HYDRL	NF-2D LITE ALL
X12A91	NOC	452X4	2	2	3							
X12CA1	CANOPY ASSY	454S2	3	37	4.2							
X12CE1	TRANSPRCY AFT FIXED	452X4	2	9	4.2							
X12DD1	ACT SW CODE DSTRCT	454S2	3	5	7.5							
X12EA1	REEL ASSY PWR INERT	454S2	1	1	0.3							
X12EB1	STRUCTURE ASSY SEAT	454S2	3	1	2							
X12E01	EJECTN SEAT ACES II	454S2	3	23	3.8							
X12Z91	NOC	452X4	2	3	1.2							
X12Z92	NOC	454S2	2	3	0.5							
X12091		452X4	1	3	1							
X13AC1	LIGHT LANDING CONF	452X2	2	1	5					Y		
X13A91	NOC	452X4	2	2	0.6					Y		
X13FA1	ACTUATR NW STEERING	452X4	1	1	1				Y	Y		Y
X13HA1	AXLE MLG L/H	452X4	3	6	3.3				Y	Y		Y
X13HC1	HYD COMPONENTS	452X4	2	2	2.5				Y	Y		Y
X13JA1	STRUT SHOCK NLG	452X4	3	5	4.9						Y	
X13KA1	MLG WHEEL/TIRE ASSY	452X4	2	6	1.5							
X13KB1	NLG WHEEL/TIRE ASSY	452X4	2	2	1.3							
X13LA1	VALVE MLG BRAKE CTL	452X4	2	24	1.8				Y	Y		
X13L01	BRAKE/SKID CONTROL	452X4	1	3	0.7				Y	Y		
X14AA1	COMPUTER FLIGHT CONT	452X4	1	1	1				Y	Y		
X14AC1	LINK RUDD PLT CONT	452X4	2	1	1				Y	Y		
X14AE1	PANEL MANUAL TRIM	452X2	2	5	1				Y	Y		
X14AP1	CMPTR DIG FLGT CNTR	452X2	2	78	1.5				Y	Y		
X14BA1	INT SERVO ACT RUDD	452X4	2	10	2.7				Y	Y		
X14BD1	INTG SRVO ACT SP PN	452X4	1	2	0.2				Y	Y		
X14CC1	FLAPERON ASSY LH	452X4	3	14	3.1				Y	Y		
X14C91	NOC	452X4	2	2	3				Y	Y		
X14DH1	BRK ASSYMETRY LE DR	452X4	3	1	2				Y	Y		
X14DL1	LEADING EDGE FLP LH	452X4	3	1	1				Y	Y		
X14D01	LEADING EDGE FLAPS	452X4	2	1	2				Y	Y		
X14ED1	SPEEDBRAKE LWR SRFC	452X4	2	2	4				Y	Y		

F-16C BLK 40/42 LCOM TASKS
AGE USAGE WORKSHEET

LCOM				500	PERCENTAGE AGE USAGE FOR LCOM TASK										
TASK	TASK DESCRIPTION OR	AFSC	#	DAY	AVG.	TIME	MC-1A	COMPRS	MC-2A	N2 CART	AIR CON	AM32C-10	AM32A-10	MJ-2A	NF-2D
NAME	SYSTEM/SUBSYSTEM			HITS									PWR GEN	HYDRL	LITE ALL
X14FC1	PNEU SENSOR ASSY	452X2	2	2	1.5						Y		Y		
X14FG1	TUBE PITOT STATIC	452X4	1	3	2						Y		Y		
X24AA1	PWR UN TURBINE EPU	452X5	2	1	3										
X24AD1	PUMP HYD EMERGENCY	452X4	2	1	8										
X24A01	POWER SECTION EPU	452X4	2	2	1.5										
X24A91	NOC	452X4	2	2	2										
X24BA1	TANK ASSY HYDRAZINE	452X4	1	1	1										
X24BE1	VALVE BA REG SHTF	452X2	2	4	2										
X24DA1	STARTER JET FUEL	452X4	2	33	3.6					Y	Y		Y		
X24DC1	CONT JET FUEL START	452X4	2	14	1.4										
X24DD1	DUCT INLET	452X4	2	4	4.4										
X24DE1	MOTOR HYD START	452X4	1	2	1.5										
X24DF1	EXCITER IGNITION	452X4	2	1	0.5							Y			
X24D91	NOC	452X4	2	2	1.2										
X24EA1	GEARBOX ACCESS DR	452X4	2	1	8					Y	Y		Y		
X24EB1	SHAFT POWER TAKEOFF	452X4	2	21	1.6										
X24001	AUX POWER PLANT JFS	452X4	2	4	2										
X27AG1	DRIVE COMPONENTS PTO	452X4	2	7	0.8										
X27A91	NOC	452X4	2	1	1										
X27EC1	EXHAUST NOZZLE ASSY	452X4	2	6	0.7										
X27ED1	XDUCER NOZZLE POSTN	452X4	2	2	3.3										
X27E91	NOC	452X4	2	1	2										
X27GA1	MAIN FUEL SYSTEM	452X4	2	4	1.9										
X27GJ1	LUBRICATION SYSTEM	452X4	2	5	2										
X27GP2	ELECTRICAL SYSTEM	452X4	2	36	2.2										
X27GS1	IGNITION SYSTEM	452X4	2	1	0.7							Y			
X27G01	ENGINE SYSTEMS	452X4	3	5	8.3										
X27G91	NOC	452X4	1	2	2										
X27Z01	TURBOFAN ENGINE LRU	452X2	3	2	4										
X27Z02	TURBOFAN ENGINE LRU	452X2	2	2	9.5										
X27Z02	TURBOFAN ENGINE LRU	452X4	2	2	9.5										
X27Z03	TURBOFAN ENGINE LRU	452X4	3	122	6.6										

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AGE USAGE WORKSHEET

LCOM TASK NAME	TASK DESCRIPTION OR SYSTEM/SUBSYSTEM	AFSC	#	500		PERCENTAGE AGE USAGE FOR LCOM TASK						MJ-2A HYDR	NF-2D LITE ALL
				DAY	AVG. TIME	MC-1A COMPRS	MC-2A COMPRS	N2 CART	AIR CON	AM32C-10 PWR GEN	AM32A-10 PWR GEN		
X27001	TURBOFAN POWR PLANT	452X4	3	17	5.4								
X271B1	RACK ASSY CONTROL	452X4	2	7	3.5								
X271D1	ENGINE MOUNT SYSTEM	452X4	1	3	2.5								
X271F1	ENG INLET ICE DETCT	452X4	1	8	0.8					Y			
X271J1	ENGINE WARNING SYS	452X4	2	4	2					Y			
X27191	NOC	452X4	1	1	1								
X41AA1	VLV B/A REG SHTF 13	452S5	3	3	1.1					Y			
X41AA3	VLV B/A REG SHTF 13	452X5	2	5	1.5					Y			
X41AB1	TURBINE COOLING	452X5	1	1	0.2					Y			
X41AD1	VLV RADAR COOL SHTF	452X5	2	3	3					Y			
X42AJ1	GEN 10 KVA/FLCS PMG	452X5	2	2	2.3								
X42AN1	CONVERTER/REGULATOR	452X2	2	1	2								
X42BD1	GEN CNTRL UN 10 KVA	452X5	2	4	3								
X42GA1	BATTERY AIRCRAFT	452X2	2	1	1					Y			
X42GA2	BATTERY AIRCRAFT	452X4	2	222	0.9					Y			
X42GC1	BATTREY A/C IN PRF	452X4	2	65	1.2					Y			
X42GD1	CONTRL UNIT CHARGER	452X2	2	2	1					Y			
X42GD2	CONTRL UNIT CHARGER	452X4	2	4	1					Y			
X42G91	NOC	452X2	2	4	1				Y	Y			
X44AA1	LIGHT TAXI	452X4	1	28	1					Y			
X44AC1	PWR SUP ANTI-COL LT	452X2	2	2	2					Y			
X44A91	NOC	452X5	2	2	1					Y			
X44BA1	PANEL INT LIGHT CNT	452X4	2	1	2					Y		Y	
X45AA1	PUMP HED SY A P1103	452X4	3	14	2.9			Y		Y		Y	
X45AH1	RESERVOIR HYD 800CI	452X4	2	4	3.3			Y		Y		Y	
X45A91	NOC	452X4	2	46	0.7			Y		Y		Y	
X45B91	NOC	452X4	2	2	0.5			Y		Y		Y	
X46AB1	PUMP WING SCAVANGE	454S3	3	4	5 Y								
X46A91	NOC	452X4	2	2	0.5 Y								
X46CA1	VLV VNT/PRESS EX TK	454S3	3	2	5.8 Y								
X46CN1	RESERVOIR HALON	452S5	2	1	0.5 Y								
X46CN2	RESERVOIR HALON	452X4	1	29	1 Y								

F-16C BLK 40/42 LCOM TASKS
AGE USAGE WORKSHEET

LCOM	TASK DESCRIPTION OR	AFSC	#	500	AVG.	PERCENTAGE AGE USAGE FOR LCOM TASK								
TASK	SYSTEM/SUBSYSTEM			DAY	HITS	TIME	MC-1A	MC-2A	N2 CART	AIR CON	AM32C-10	AM32A-10	MJ-2A	NF-2D
NAME							COMPRS	COMPRS				PWR GEN	HYDRL	LITE ALL
X46DA1	TANK WING	454S3	3	3	0.5	Y								
X46ED1	INDICATOR FUEL FLOW	452X2	2	2	1						Y			
X46EE1	CONTROL UNIT FUEL L	452X2	2	1	1						Y			
X46EL1	XMTR FL QTY F1 TK F	452X4	2	2	0.5						Y			
X46FA1	TANK 370 GALLON EXT	452X4	2	7	0.7	Y								
X46FC1	DISC EXT TK FL WING	452X4	2	2	0.7	Y								
X46FD1	TK 370 GAL EXT PYLN	452X4	1	6	1	Y								
X47AA2	CONVERTER LOX 5 LIT	452X4	1	158	1									
X47AA3	CONVERTER LOX 5 LIT	452X4	1	3	1									
X47AA3	CONVERTER LOX 5 LIT	452X5	1	3	1									
X47AA4	CONVERTER LOX 5 LIT	452X5	2	11	1.6									
X47AB1	SW OXY LO PRES WRNG	452X4	1	2	0.3				Y		Y			
X47A91	NOC	452X4	1	1	1									
X49AB1	EL SENSNG 126 INCH	452X5	2	1	2									
X51AB1	ALTIMETER SERVOED	452X2	2	4	1.5						Y			
X51AF1		452X2	2	1	0.1						Y			
X51BA1	IND HORIZ SITUATION	452X2	1	2	0.3						Y			
X51BB1	IND ATTITUDE DIRECT	452X2	2	1	0.8						Y			
X51D91	NOC	452X4	2	4	1						Y			
X55AD1	TRANSMITTER SURFACE	452X4	3	4	1.5									
X63BL1	R/T1505 AFT TO 1460	452X2	2	55	1.1						Y			
X63CB1	PRCS/ADPTR SEC VOIC	452X2	2	2	1.5						Y			
X63C01	SYS SEC VOICE COMM	452X2	2	2	2						Y			
X65AA1	RECEIVER TRANSMITTE	452X2	2	1	0.5					Y	Y			
X65AD1	TRANSPONDER COMPUTR	452X2	2	1	7					Y	Y			
X69AA1	PANEL ASSY AUDIO 1	452X2	3	4	3						Y			
X69AC1	PANEL AUXILLRY COMM	452X2	1	2	0.5						Y			
X71AA1	RCVR XMITTER TACAN	452X2	3	7	0.5					Y	Y			
X71C01	A VHCL NAV SBSYS	452X4	1	4	0.5					Y	Y			
X71DA1	RCVR/PROCESSOR GPS	452X2	2	1	1					Y	Y			
X71D01	GLOBAL POSNG SYS	452X2	2	4	4.7					Y	Y			
X74AG1		452X2	2	1	1					Y	Y			

F-16C BLK 40/42 LCOM TASKS
AGE USAGE WORKSHEET

LCOM						500				PERCENTAGE AGE USAGE FOR LCOM TASK							
TASK	TASK DESCRIPTION OR SYSTEM/SUBSYSTEM	AFSC	#	DAY	AVG. TIME	MC-1A COMPRS	MC-2A COMPRS	N2 CART	AIR CON	AM32C-10	AM32A-10	MJ-2A	NF-2D				
X74AM1	RADAR ANTENNA	452X2	2	11	1.6				Y		Y		LITE ALL				
X74AN1	MODULAR LPRF	452X2	2	1	1				Y		Y						
X74AP1	XMITTER DUAL MODE	452X2	2	7	1.1				Y		Y						
X74AQ1	PROG SIGNAL PROCSSR	452X2	2	11	1.1				Y		Y						
X74AU1	WAVEGUIDE ASSY	452X2	2	3	1				Y		Y						
X74A01	FIRE CONT RADAR SET	452X2	2	1	1				Y		Y						
X74A91	NOC	452X2	2	3	2				Y		Y						
X74BT1	PDU DEFRACTIVE HUD	452X2	2	14	1.2				Y		Y						
X74BU1	ELCTRN UN DIFF HUD	452X2	2	5	0.7				Y		Y						
X74CE1	GEN AVIONICS COMPTR	452X2	2	7	1.3				Y		Y						
X74DF1	INERTIAL NAVIGTN UN	452X2	2	4	0.8				Y		Y						
X74DG1	BATTERY INU	452X2	2	10	2.3				Y		Y						
X74D01	INERTIAL NAVIG SET	452X2	2	4	2.4				Y		Y						
X74GA1	SENSOR CVTS CKPT TV	455S0	2	1	0.9				Y		Y						
X74GB1	RECORDER A-B VD TP	455S0	2	19	0.9				Y		Y						
X74JA1	DATA ENTRY DISPLAY	452X2	2	1	1				Y		Y						
X74JL1	EXP DAT ENT ELCT UN	452X2	2	7	0.9				Y		Y						
X74KB1	PRGMMBL DSPLY GNRTR	452X2	2	5	1.1				Y		Y						
X74KE1	MONTR AFT SEAT HUD	455S0	2	2	2				Y		Y						
X74LA1	RCVR/XMTR RDR ALT	452X2	2	2	1.7				Y		Y						
X74LC1	ANT RADAR ALT FWD	452X2	1	1	1				Y		Y						
X74LE1	CONVERTER SGNL DATA	452X2	1	1	1				Y		Y						
X74L91	NOC	452X2	2	5	0.3				Y		Y						
X74PA1	ANTENNA GIMBAL ASSY	452X2	2	3	1				Y		Y						
X74PH1	ENVRN CNTL UNIT	452X2	1	1	4				Y		Y						
X74P01	NAVIGATIONAL SET	452X2	2	7	1				Y		Y						
X74ZA1	MUX BUS #1 FWD AVNC	452X2	2	3	0.9				Y		Y						
X74ZB1	MUX BUS #2 FWD AVNC	452X2	2	2	2				Y		Y						
X75AA1	GUN ASSEMBLY 20MM	462X0	3	10	6.2				Y		Y						
X75AB1	DRUM ASSY AMMO	462X0	3	1	3.3				Y		Y						
X75A01	GUN SYSTEM	462X0	3	40	7.1				Y		Y						
X75BA1	PYLON WING WEAPONS	462X0	3	27	0.9				Y		Y						

F-16C BLK 40/42 LCOM TASKS
AGE USAGE WORKSHEET

LCOM TASK	TASK DESCRIPTION OR SYSTEM/SUBSYSTEM	AFSC	#	500			PERCENTAGE AGE USAGE FOR LCOM TASK				AM32C-10 PWR GEN	AM32A-10 HYDRL	NF-2D LITE ALL
				DAY	AVG. TIME	HITS	MC-1A COMPRS	MC-2A COMPRS	N2 CART	AIR CON			
X75BB2	PYLON CENTERLINE	462X0	3	16	0.6					Y	Y		
X75BD1	ADPTR MSSLE LAUNCHR	462X0	3	12	0.4					Y	Y		
X75CB1	LAUNCHER WING TIP	462X0	3	29	0.7					Y	Y		
X75CJ1	DISP BOMB SUU-20B/A	462X0	3	27	0.6					Y	Y		
X75CK1	RACK EJECT TER-9/A	462X0	3	43	0.7					Y	Y		
X75CL1	LAUNCHR MSL LAU-117	462X0	3	1	1					Y	Y		
X75CN1	LNCR MSL WT LAU-129	462X0	3	1	0.5					Y	Y		
X75CP1	LNCR MSL UW LAU-129	462X0	3	33	0.8					Y	Y		
X75DD1	RMTE INT JET-RL SMS	462X0	3	10	1.6					Y	Y		
X75DF1	REMOTE INF UN NCLR	462X0	3	12	0.5					Y	Y		
X75DQ2	INTFC UNIT ENH CTRL	462X0	3	14	1.6					Y	Y		
X75EM1	MTX WG STR 2&8 A908	462X0	3	2	0.5					Y	Y		
X76BC1	BLNKR UNT ADV INTFC	452X2	2	4	2.9					Y	Y		
X76CC1	ADAPTER ASSY ECM PO	452X2	3	35	0.8					Y	Y		
X76CE1	POD ALQ-131	452X2	3	40	0.9					Y	Y		
X76C01	ECM POD SET	452X2	2	5	0.8					Y	Y		
X76EB1	CONTROL PNL AUX IND	452X2	2	2	0.5					Y	Y		
X76EC1	AZIMUTH INDICATOR	452X2	2	3	1					Y	Y		
X76EE1	RECEIVER CONTR FSRs	452X2	2	2	1					Y	Y		
X76EG1	SIGNAL PROCESSER	452X2	2	9	0.8					Y	Y		
X76EL1	AMP DETECTR E-J FWD	452X2	2	1	2					Y	Y		
X76EM1	AMP DETECTR E-J AFT	452X2	2	4	1					Y	Y		
X76W01		452X2	3	24	0.9					Y	Y		
X91A01	KIT ASSY SURVIVAL	452X4	2	43	0.5								
X97AF1	DET TRNS 51126-1	454S2	2	5	1								Y
X97AT1	DETNTN TRNSFR ASSY	454S2	2	2	1								Y
X97AW1	DET TRNS 16K0341-25	454S2	2	3	4								Y

APPENDIX C
FLYING SCHEDULES USED

Different Schedules:

18 aircraft:

Schedule 18a:

- 5 missions of 2 sorties each at 0800
- 4 missions of 2 sorties each at 1200
- 5 missions of 2 sorties each at 1600
- 3 missions of 2 sorties each at 1800
- 1 mission of 2 sorties at 2400

Schedule 18b:

- 5 missions of 2 sorties each at 0600
- 5 missions of 2 sorties each at 1200
- 5 missions of 2 sorties each at 1800
- 3 missions of 2 sorties each at 2200

Schedule 18c:

- 5 missions of 2 sorties each at 0800
- 5 missions of 2 sorties each at 1200
- 5 missions of 2 sorties each at 1600
- 3 missions of 2 sorties each at 2000

Schedule 18d:

- 3 missions of 2 sorties each at 0600
- 3 missions of 2 sorties each at 0700
- 3 missions of 2 sorties each at 0800
- 3 missions of 2 sorties each at 1500
- 3 missions of 2 sorties each at 1600
- 3 missions of 2 sorties each at 1700

Schedule 18e:

- 6 missions of 2 sorties each at 0600
- 6 missions of 2 sorties each at 1200
- 6 missions of 2 sorties each at 1800

Schedule 18f:

- 5 missions of 2 sorties each at 0600
- 5 missions of 2 sorties each at 1400
- 4 missions of 2 sorties each at 2200

9 aircraft:

Schedule 9a:

- 3 missions of 2 sorties each at 0800
- 3 missions of 2 sorties each at 1200
- 3 missions of 2 sorties each at 1600

Schedule 9b:

- 3 missions of 2 sorties each at 0800
- 2 missions of 2 sorties each at 1200
- 2 missions of 2 sorties each at 1600
- 2 missions of 2 sorties each at 1800

Schedule 9c:

- 2 missions of 2 sorties each at 0600
- 2 missions of 2 sorties each at 0700
- 1 mission of 2 sorties at 1200
- 2 missions of 2 sorties each at 1700
- 2 missions of 2 sorties each at 1800

Schedule 9d:

- 4 missions of 1 sortie each at 0600
- 4 missions of 1 sortie each at 0700
- 2 missions of 1 sortie each at 1200
- 4 missions of 1 sortie each at 1700
- 4 missions of 1 sortie each at 1800

Schedule 9e:

- 3 missions of 2 sorties each at 0600
- 2 missions of 2 sorties each at 1200
- 2 missions of 2 sorties each at 1800
- 2 missions of 2 sorties each at 2200

3 aircraft:

Schedule 3a:

- 1 mission of 2 sorties each at 0800
- 1 mission of 2 sorties each at 1200
- 1 mission of 2 sorties each at 1600

Schedule 3b:

- 1 mission of 2 sorties each at 0600
- 1 mission of 2 sorties each at 1200
- 1 mission of 2 sorties each at 1800

Schedule 3c:

- 1 mission of 2 sorties each at 0600
- 1 mission of 2 sorties each at 1400
- 1 mission of 2 sorties each at 2200

Schedule 3d:

- 1 mission of 3 sorties each at 0600
- 1 mission of 3 sorties each at 1700

Schedule 3e:

- 3 missions of 1 sortie each at 0600
- 3 missions of 1 sortie each at 1700